

# AMERICAN AGRICULTURIST,

FOR THE

## Farm, Garden, and Household.

"AGRICULTURE IS THE MOST HEALTHFUL, MOST USEFUL, AND MOST NOBLE EMPLOYMENT OF MAN."—WASHINGTON.

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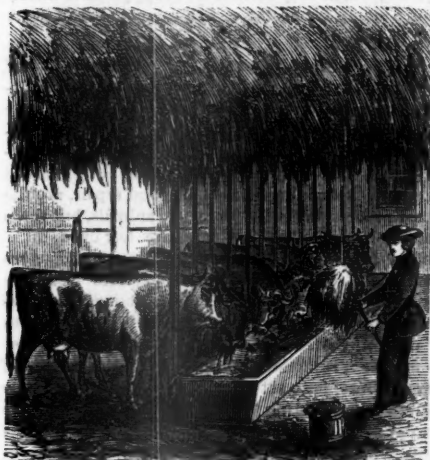
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### Suggestions and Notes for the Month.

We take pleasure in beginning our work for the year by presenting to each of our readers, the "Compliments of the Season." That the year now opening may be to each and all of them a "HAPPY NEW-YEAR," is our earnest wish. May it be rendered happy from the beginning to the close—to the farmer by abundant and profitable returns for his labors in the field; to the house-keeper by a diminution of anxious care, by freedom from severe illness in her family, by success in all her efforts to render home more attractive, more home like, than ever before; to the children and youth, by exemption from sickness, by vigorous growth of both body and mind, and by improvement in their habits and morals; to our common country by the return of peace, founded upon such principles as shall render that peace a perpetual one.—That our readers may secure the happy year we wish them, we shall on our part spare no labor or thought. We look at half a million sheets of pure white paper already in store, with as many more to be added, and the thought comes up that all of these are to be covered with the symbolic marks that convey ideas, and then be scattered broadcast over the land. May we be able to send forth such words, such thoughts, such hints and suggestions, as shall be best calculated to promote the pleasure and profit of all who peruse these pages.—We note down in these first columns some hints which, if not specially instructive, will at least serve as reminders of work to be done. The labors of the month will always go on more regularly, and be better done, if a well digested plan be laid down. Our first hint then is: Sit down with paper, and pen or pencil, and lay out the work for Janu-

ary: What must be done, what ought to be done, how much can be done, what must be done the first week, the second, and so on. Into this calculation must enter the probable interruptions and delays. This and the following month are essentially the farmers' resting season, though the care of stock, the providing of a year's fuel where wood is burned, the unfinished work in the grain department, and perhaps among out-standing corn, especially at the West, with other items detailed below, will keep many farmers pretty fully occupied. It is well to remember, however, that a bow that is always bent loses its elasticity; so, every farmer at least should at this season, lay on some extra muscle, and recruit his vigor for the exhaustive labors of the Spring, Summer and Autumn.

#### Work for the Farm, Household, etc.

**Account Keeping.**—Some system of keeping accounts is essential to the best success of every farmer. A sheet or two of paper with a debtor and creditor side, is better than nothing. On one side put down every item owed, and to whom; and on the other, note every item due. Sum up the condition of your worldly possessions in two columns. Every day's transactions, whether cash or credit, should be written down with the date. This should include every purchase for ready money, or on time, of a neighbor, or at the store, etc. It would pay well to have a debt and credit account with each kind of farm labor, with each field, each kind of animals, of family expenses, etc. Such accounts lead to thinking, to investigation, to carefulness. The written record to refer to, would prevent not a few of such scenes as are portrayed on page 9. Skill in book-keeping is not required; "quail tracks on paper," barely plain enough to be understood, are far better than no record.

**Buildings.**—Replacing a shingle on the roof of the house or barn may save much damage from leakage. Hundreds of roofs fall in every year from accumulations of snow. If the rafters and covering are known to be abundantly strong, no further care is needed; otherwise remove any extraordinary deposits of snow. A wooden hoe on the end of a long pole will answer. An extra strip of wood, or of listing, on the window or door casings may shut out much cold. We have seen a man using half his spare time in cutting, hauling, and carrying in wood to keep up a rousing fire, when there was an inch crack under the outer door that let in cold air enough to use half of the heat produced. An hour in stopping that crack would have saved forty hours spent at the wood pile, and added greatly to the comfort of the house. He "saved at the tap and wasted at the bung-hole." Better spend one day in stopping up the cracks, than ten in keeping up the fire. Some time since, we showed, how cotton was worth \$10 a pound; a pound of it in the cracks and crevices shut out more cold than \$10 worth of fuel could

drive out.... We repeat last month's hint, that the less outside protection a man or animal has, the more food must he consume to keep up the internal fire. Make not only the house, but the stalls, the sheds, and the styes, warm; make the animals comfortable, and far less food will be needed. A double floor or a warm cellar underneath will also save fuel and food, and promote health. See "Children on the Floor," page 21.

**Cattle.**—In brief, make them comfortable; they will look better, feel better, eat less, be more healthy, and be worth far more in Spring. Every animal should have some shelter from wind, rain, and snow. If not a stall, then a good shed. If on a new farm on the prairie, where timber is yet too scarce and costly for your means, a rail pen covered around and above with straw or stalks, will well pay for its cost, in the better condition and growth of the animals. If water is scarce, better melt snow over the fire than to compel them to eat snow. Extra fuel (food) must be supplied to keep up the fire in their bodies, if snow is melted there. The extra digestion required for this, detracts from health, vigor, and growth. Remember the salt rations at least twice a week. That weak animal will continue a "runt," if kept from a full supply of food and from shelter, by another overbearing animal. Give it some protecting division line.

**Cellars.**—Foul air breeds decay. All rubbish, or rotting vegetables should be removed. Families living in a new or swampy country suffer from malaria; decaying vegetables in the cellar send up similar gases through the house or barn cellar. If damp, a few boards or straw on the bottom, to walk on, may save wife a cold, perhaps a fit of sickness, if she goes there often from a warm room, with thin shoes on. Ventilate as often as the weather will permit, but stop out the thief Jack Frost, with an extra bank of earth or tan bark, if the walls be not amply thick and impervious. An hour's frost may destroy the products of weeks of toil. A coat of whitewash, put on the walls and ceiling even now, will promote neatness and sweetness, and save the necessity of an extra light, if the windows be deficient or in part covered. The best windows are those with double glass, half an inch to an inch apart, and the sash on hinges. Room may be saved by having the sash hung at the top to swing up to a hook.

**Colts.**—See hints on page 11. Care in breeding, and in feeding also, has produced our improved horses. Stunted colts make stunted horses. By means of good nourishing food, not overgraining, you may develop large muscles, strong bones, capacious healthy lungs, and turn out a far more valuable horse for any kind of work.

**Club Meetings.**—Farmers need the benefit of these more than any other class. Mechanics, merchants, and business men generally, come more in contact; their ideas are rubbed up bright

by practice; they learn from each other's methods; they talk more about their work and the best way of doing it, than farmers who are separated from constant intercourse by their broad acres. The meetings for social chat about farm matters held at the school house, or from house to house, are of great utility. No one ever attended such a meeting without carrying home some new hint, or having a new train of thought started. Too much formality, too long a constitution and bye-laws, are to be avoided. The more familiar, conversational they are, the better. Every neighborhood in which they are held will be benefited, and their effects will be seen not only in greater crops, better roads, tidier farms, and better stock, but in healthier, and happier inhabitants. Especially, should the young men be induced to take part in these meetings: they should be taught that agriculture is ever progressive, and that he who does not keep pace with it, must be, like Tim Bunker's neighbor, Jake Frink, always "runnin' astarn." (See Dec. *Agriculturist*, page 364.)

**Hogs.**—Those to be slaughtered will lay on fat all the faster for being kept warm. Those having large numbers fattening on the western prairies may hasten their plans and save corn, by providing good nests, if not in warm pens, then among the stalks, or in straw heaps. It will pay to dig pits for them in the ground, covering with straw or sheltering to shut out cold and storms. Feed the lighter grains and soft corn first, finishing off always with good sound corn. Experience proves that it pays well to grind and steam hog food.—Store hogs, those kept over, will at the East, almost pay for their board in making manure, if rightly managed. See rules for making "Prime Pork," on another page. Supply them plentifully with coarse litter, forest leaves, straw, etc., and they will manufacture a valuable fertilizer without the help of machinery, without the help of an overseer, even without instructions. Give fattening hogs plenty of cooked food, and provide good shelter for all.

**Horses.**—Avoid sprains and hoof diseases from frozen ground, or snow and mud slush, by prompt and careful shoeing; prevent coughs and colds by comfortable blanketing when standing in cold winds and promote general health by just enough of good food, and by comfortable, clean, light, and ventilated stables, and frequent cleaning and rubbing.

**Humbugs.**—Look out for them. They always come upon one unawares in a new and attractive garb—golden-tinged. When anything is offered astonishingly cheap, look out for a cat in the meal, especially if it is an article with which you are not familiar. See notes elsewhere.

**Ice.**—Get in a full supply as soon as sufficiently thick and solid. In the better preservation of food in hot weather, and in case of sickness alone, it may be worth its full cost, to say nothing of the luxury of having at hand a supply of "pickled coolness" in midsummer weather. Ice is not difficult to keep. A rough shed about 12 feet square and 10 or 12 feet high, well roofed and out of the sun, with enough of clean saw-dust to fill in five or six inches thick between the ice and the boards, and also to cover it well, will preserve enough ice for a season's supply for an ordinary family. If the shed is not built, erect the frame and cover it; then pack in the ice in freezing weather, and sprinkle on water enough to fill up and make the pile a solid block. Then commence at the bottom to fasten on the outside boards and fill in the sawdust as the boards rise. A double frame that would admit of sliding the boards in between the posts, would enable the filling to be done in this way, year after year.

**Implements.**—There may be a scarcity of farm laborers during the coming season, and those who secure the best labor-saving implements will be fortunate. Though these can not all be practically tested in Winter, it is well to be on the lookout for information relative to them. Visit first class farmers, bring up the subject in farmers' club meetings, and read agricultural publications. A day devoted to finding an implement that will save a week's labor, besides paying good interest on its cost, is time well spent. By all means see that

those already on hand are in good repair, and well preserved from rust, rot and accident. As hitherto frequently suggested in the *Agriculturist*, a coating of three parts of lard and one of rosin melted together and rubbed on them, will prevent iron and steel from rusting.

**Manure.**—Our Western readers, on the virgin soils, where organic matter yet abounds, usually skip the manure articles. Eastern farmers, on the old lands, are annually learning more of the value of good manure. A few loads of good manure per acre will often double a crop without increasing the other expenses of preparing the ground, seed, and cultivation. Every kind of animal or vegetable matter, from the dead carcass, to the black earth in the woods or swamp, will by decay furnish nutriment to any growing crop. The compost heap is the gold mine of the farm. Into this heap, let every handful of animal droppings go, and with these all the vegetable matter possible, the leaves from the forests and elsewhere, black earth from the woods and swamps, sods, weeds, etc. The heterogeneous mass, frequently forked over and well rotted, will tell on next Summer's crops. See article on covering manure, page 14.

**Marketing.**—An important feature in successful farming is judicious marketing. Many farmers must sell as soon as possible, but it is desirable to have good facilities for reaching the market, and also to be so forehanded as not to be obliged to sell when fair prices can not be obtained. The farmer can then watch the market reports and study the probable home and foreign supply and demand, and determine with considerable accuracy when it is best to sell. The farmer who gets \$1 per bushel for his wheat realizes double the profit that he does who only gets 80 cents, provided the cost of producing is with both 60 cents per bushel. It pays to study marketing well, and also to prepare and put up in the best manner all perishable produce, such as butter, poultry, fruit, pork, vegetables, etc.

**Plow** heavy soils deeply, in mild spells of weather, when dry enough, and thus secure the benefits of freezing and snow, which are often of great value.

**Poultry** will pay for good housing, feed, and care now. Eggs retail here in the city, at this season, for 25 to 35 cents per dozen, and the buying price is correspondingly high. Give the fowls gravel and sand to scratch in, with grain and bits of meat. A little lime or powdered oyster shells, vegetables, ashes, and plenty of pure water should also be supplied. The opinion that fowls need no water, leads to the prevalent custom of leaving them to get their liquids from the filthy yard, or by eating snow and ice. Give the fowls, especially the laying hens, a constant supply of clean water.

**Roots** stored in cellars or in pits for feeding out, may require additional protection from frost. They need some ventilation, otherwise the dampness from evaporation of their juices which is continually going on, will make the surrounding air a good conductor of heat, and they may be frozen. If any are decaying, remove them at once. In feeding, give them as a relish with dry food, rather than as a staple article of diet.

**Seeds.** Keep in a dry and cool place, away from rats and mice; these are particularly fond of pumpkin and squash seeds. A little care now will save much annoyance at planting time. Now is the time, if not already done, to get ready all seed needed in Spring. It is always high at seeding time.

**Sheep** need a few roots, turnips or potatoes, dally, with the other dry food. Do not suffer them to lose flesh now. Keep sheep separate from other animals, liable to worry or injure them. It is not too late to put bucks with ewes for lambs to be dropped during the first of June.

**Steers.** Commence handling while young, as they are then more within one's power, and readily become accustomed to being controlled. Do not load them heavily, or treat them harshly. Give them full opportunity to learn what you want of them, before expecting obedience.

**Wood.** Store a plentiful supply in a dry place. The finer it is cut, the more thoroughly it will dry, the quicker it will boil the dinner, and the better answer every good purpose. See remarks on green and dry wood in November Calendar.

### Orchard and Nursery.

Not much active work can be done in this department the present month, and but few hints are needed in this month's Calendar. In laying out the plans for the year, it may be well to inquire, whether more trees may not be planted with profit. Fruit trees do not require much ground the first five years, and when they do, their products repay the loss of surface. How much does it cost to raise and to annually tend a tree that in a few years will return large crops of apples or other fruits? It will be economy to now look up and engage the trees desired in Spring, so that they may be provided for, and ready to come at the best dates. Most of the leading nurseries have catalogues of names and prices, which they furnish free to applicants enclosing a stamp for postage. See valuable list of pears on page 17.

"A penny saved is earned." A single day's labor seasonably and judiciously devoted to precautionary measures in the Orchard and Nursery, may save both money and vexation of spirit. Domestic animals, rabbits, mice, strong winds, etc., are ever liable to produce injury, and should be fully guarded against. Good fences, kept in good repair, are the best protection against domestic animals, but these are of little avail, if the gates are left open, as is often the practice in Winter. Various methods are employed to protect the trunks of trees from the attacks of rabbits. They may be bound with paper near the base, which is to be besmeared with tar. One of the simplest, easily applied, and most effective protections of the base of the trunks of small trees, is to set around them two horse-shoe drain tiles, fastening them together with a wire wound around. Of course, neither mice nor rabbits can injure trees so protected. Dried grasses or weeds, or banks of snow furnish good breeding places for mice. The removal of the rubbish, and the hard tramping of deep snow around the trunk should be attended to when mice are troublesome.

Occasional attention should be given to staking and tying up trees swayed by strong winds.

Cions for grafting, and cuttings for propagation may be made in January or February before the sap starts. Put them in boxes of barely moist sand or earth, in a cool part of the cellar. They will thus keep well for months. Cut these from thrifty, well matured wood of last season's growth.

Drainage is quite as important for fruit trees, as for farm crops. Trees standing in a wet, damp soil are injured by freezing, and the soil is cold and damp all the year. No water should stand in hollows around the trees. A deep drain run near a fruit tree often acts like magic upon its growth and fruit bearing. In open weather this month, new drains may be opened to advantage.

Large fruit trees and deciduous (leaf shedding) shade trees may be moved with convenience and safety during the coldest weather, by cutting out and taking up around the roots a considerable mass of frozen earth. We assisted in successfully moving a shade tree two feet in diameter. A deep channel was cut around the trunk at the distance of 4 to 5 feet. The frozen mass was dug underneath, and boards worked under, with one end on the surface. Bundles of trees were placed around the bark to protect it, which were held in place with a heavy chain, to this were attached three yokes of oxen. A dozen ropes from the branches on every side, to steady the tree and keep it upright, were held by several neighbors, who volunteered to assist. The tree was slid along on boards and planks laid down, and it was thus moved some 50 feet into a new hole, and loose soil packed in around the frozen earth. A large heap of stones put on, kept it from blowing over during the first year. The tree grew and flourished, as if nothing



had happened to it. Smaller trees may be readily moved without so much labor.

Stakes and labels should be prepared in Winter. Some recommend to make them more durable by soaking them in a solution of 1 lb. of blue vitriol in 3 gallons of water. Straight grained pine, sawed into suitable lengths, and split and whittled smooth, are the simplest and most easily made. A notch is required on both sides of one end, to tie by. A little thick white paint, rubbed on with a cloth before marking, preserves them, makes the letters more visible, and the paint fastens the pencil marks.

Those intending to plant trees next Spring, are recommended to excavate large holes now (if not already done) where trees are to be set. The frost and snow greatly ameliorate the subsoil. Besides this benefit, important time in the busy season is gained. It pays well, at least on heavy soils, to expose the subsoil of the whole area of the new orchard, in Winter, to the action of snow and frosts.

### Kitchen and Fruit Garden.

In northern localities the ground is either frozen or covered with snow so that but little can be done during the present month. Still, the garden should occasionally be visited to see that all is going on well. If water stands on any places occupied by crops it should be removed by surface drains, if underdrains be not practicable at once. See that fences are tight and gates properly fastened, to all enclosures containing fruit trees and shrubs. A hungry stray animal will do irreparable injury in a few hours if allowed to enter the garden. Much can be done in planning to facilitate Spring work. Every garden of moderate dimensions should be mapped at leisure, and all projected alterations or improvements indicated. The place for all the main crops should be marked upon the map. It is quite important to have a regular rotation of crops, there being scarcely any vegetable, save onions, that succeeds well on the same ground year after year. In arranging the planting map, those plants liable to mix should be put as far apart as possible; this is especially important for squashes and melons and the different varieties of sweet corn. In open weather the ground may still be plowed if not too wet.

*Bean poles, Stakes* of all kinds, Pea Brush, etc. Now is the best time to get a good supply. If left until Spring work begins, it is very apt to be hurriedly done or neglected. If the lower ends of the poles be soaked in a solution of 1 lb. of blue vitriol in 12 quarts of water they will be more durable. White birch, where obtainable makes good pea brush.

*Cold Frames.*—Protect in severe weather by straw mats covered by boards or shutters. A covering of snow helps protect the plants. In mild weather ventilate and let the plants have light.

*Cuttings of Currants, Gooseberries, etc.* If these were not made in Autumn, secure a supply now, at times when they are not frozen. Bury them in moist but not wet sand or soil, in boxes in the cellar. They may be buried in the cellar bottom, if moderately dry ground.

*Hot-Bed Frames and Sashes.*—Old ones should be put in order and new ones made or purchased. Every garden should have a hot-bed; they are cheaply constructed and easily managed by any one of ordinary intelligence. Almost all kinds of vegetables are easily obtained some weeks earlier. The sash should be six feet long, and wide enough to contain 4 rows of 7x9 glass. The sides of the sash should be heavy enough to prevent springing; this may be obviated by an iron rod secured midway across the sash. Unless one is very clever workman, it will be found cheapest to purchase the sash ready glazed. The glass should lap about  $\frac{1}{4}$  of an inch and be well secured by points and putty at the sides. No putty is required where the panes overlap. The frames should be made of plank, firmly nailed together. They may be one foot high in front and two feet high at the rear, and of a length suitable for two or three sashes if so many are used.

*Seeds.*—Examine the supplies on hand, and see that they are safe from mice. Note the kinds which

it will be necessary to purchase and examine seedsmen's catalogues. Experienced persons can judge of the quality of seeds by inspection; where there is any doubt, it is safer to test them before purchasing a supply. Placed in earth or sand, not too wet, in a warm room, they will soon germinate if good.

*Tools.*—See that all are in good repair and carefully housed. One man with good tools will do as much work as two men with poor tools, yet the difference in the cost may be less than the expense of a very few days' work.

### Flower Garden and Lawn.

If any improvements are to be made here, let the plan be well considered and placed upon paper so as to be worked from.... When snow accumulates on evergreens, a slight jarring will throw it off and prevent their being broken down.... Walks and carriage drives may be made during mild weather. Dry walks should be secured by placing a drainage of coarse stones below the gravel.... Prepare an abundance of neat labels and stakes, in anticipation of the busy season.... Flower pits should be allowed air freely when the temperature is not too low. Give water sparingly if the soil is very dry; keep them carefully closed and covered during very cold weather. Look out for mice.... If trees are to be planted in the Spring, holes may be made now whenever the ground is open. The frost will greatly ameliorate the soil and fit it for the reception of roots. Large trees may be moved with a ball of frozen earth, as suggested under Orchard above.

### Green and Hot-Houses.

Care and judgment will be required to maintain a proper temperature. Listing the cracks and putting on shutters in very cold weather, will save a large amount of wood or coal—the latter an important matter at its present price. In the Green-House, where but little or no growth is desired, the temperature should be kept between 40° and 50°. In the Hot-House the range should be from 65° to 70°, and moisture of atmosphere and other conditions of rapid growth maintained. Look after ample ventilation when the out-door temperature is not low, and arrange for plenty of light. The importance of light is not always apparent to novitiates.

*Azaleas* require water as they increase in growth.

*Dulbs.*—Those desired to bloom soon are to be transferred from the Green-House to the Hot-House, where the higher temperature will favor their rapid growth. Change water in glasses every two weeks.

*Calceolarias.*—Re-pot those needing it. Turn frequently, presenting all sides equally to the light to induce upright growth.

*Camellias* should now delight the lovers of the beautiful, with a fine bloom. Water and syringe foliage every three or four days, but avoid wetting the flowers, as this will hasten their decay.

*Carnations, etc.*—Set cuttings to provide plants for early Summer bloom in the open air. Stake those in bloom, and water frequently. Those becoming pot-bound need shifting to larger pots. Cuttings also of petunias, verbenas, pelargoniums, etc., for bedding out in Spring, may now be made. Those planted last month are ready to pot off.

*Fuchsias.*—Re-pot growing plants. The imperfect ones will answer well for cuttings.

*Grapes.*—Those well advanced require plenty of air and but little water at the roots. If mildew appear, syringe with water in which a little sulphur is sprinkled. Thin out, and prune if needed.

*Insects.*—Guard against them as much as possible, by cleanliness, washing or syringing foliage, hand picking, etc. If they appear, use tobacco fumes for thrips or green fly, soap and water for scale, and clear water with sponge or syringe, for red spider.

*Manure.*—Stimulate growing plants every two weeks or so with dilute liquid manure, until plants are about to bloom, then discontinue.

*Oranges, Lemons, Oleanders, and Myrtles* should

now be put in a situation to favor a moderate growth. Clean their trunks and branches from insects.

*Peach, Nectarines, Figs, and other fruit trees* in pots, should now have a warm growing position, and re-potting if needed. Give liquid manure occasionally, and look for fruit the latter part of June.

*Soil.*—Have a supply ready for use where it will not freeze. Directions for its preparation have been frequently given in previous numbers.

*Seeds of many hardy annuals* may now be sown for transplanting early to open air borders.

Water will be needed frequently this month, especially in those houses requiring considerable heat. A mere sprinkling of the surface is not sufficient. It is well to plunge the whole pot into the water tank if the foliage begins to wilt. Fire heat often dries the earth in the bottom of the pot when the surface is moist. Keep a tank, cistern, or barrel, always full of water in the house itself, that it may be of the same temperature.

### Apiary in January.

This is a period of inactivity in the hives. For those out of doors little can be done except to secure proper ventilation, which is quite as necessary now as at other seasons, and to guard against the depredations of mice. Ice may chance to close every aperture and the bees be smothered. If mild weather occurs, and the frost leaves the hives, they may be lifted to allow the removal of dead bees and accumulated filth. Mice and other vermin may be kept out by closing the openings with wire cloth, leaving a hole large enough for the passage of a single bee. When snow covers the hives let it remain. If proper care has been taken to keep out the mice. While the sun should be allowed to fall upon the hives in very cold weather, they should be shaded during the warm spells. The bees may be tempted to fly during mild days, and may be allowed to do so unless the ground is covered with recently fallen snow. Bees that are housed require but little attention, and should not be disturbed any more than is necessary to make sure that they are secure from the attacks of vermin.

### Seasonable Directions for Mess Pork.

The following standard rules, known as "*Gentry's Directions*," are those given for putting up Prime Mess Pork, to meet the requirements of the English market. They are also adopted and made imperative, in the contracts given out for Army Supplies by the United States Government.

**QUALITY AND WEIGHT OF PIGS.**—The Pigs to weigh from one hundred to one hundred and sixty pounds each, and to be in good condition, strictly corn-fed or hard Pork. For the United States army the weight may be extended to one hundred and seventy pounds.

**PARTS EXCLUDED.**—The head is to be excluded, also the fore leg up to the breast or brisket, the hind leg including the hock or gambrel joint, and the rump, if the hams are not cut up with the sides.

**WHAT CONSTITUTES A BARREL OF PRIME MESS.**—A barrel of Prime Mess Pork consists of fifty pieces of four pounds each. If the hams are cut up and put in, there shall not be less than twenty-three side-pieces; if without hams, not less than thirty side-pieces.

**HOW TO CUT AND CURE.**—After the Pig has been split through the back, cut each side longitudinally into two strips; pack the strips into large casks or vats, and fill up with brine, having saltpeper added at the rate of one ounce to three gallons of brine; leave the strips in the brine for eight or ten days to extract the blood, and for the lean meat to take a pink color.

When ready to be packed into barrels, have each strip carefully cleaned, using a knife and brush if necessary; cut them into four-pound pieces as nearly as may be; Mess (select the pieces) as indicated, and pack neatly and compactly in layers, with sufficient salt to preserve it.

**BARRELS.**—The barrel should be twenty-eight inches long, and seventeen and a half inches over the end (when finished,) made of seasoned white oak free from sap, full bound with hickory or white oak hoops, and one iron hoop (one inch wide) on each end next below the chime hoop.

**THEORY OF MESSING.**—Pigs averaging say one hundred and forty-five pounds, will work up in messing about as follows: When the side, including the ham, is cut up there will be twenty-three or twenty-four pieces of side-meat, eight pieces of ham and saddle, and eighteen or nineteen of shoulder and neck to the barrel; excluding the hams, the number of side-pieces will be increased to thirty-one or thirty-two. In no case should there be more than six pieces of the leg part of the shoulder put into a barrel.

## Seeds for Free Distribution to all Subscribers for 1863 (Vol. 22.)

See General Remarks on Page 8, and the Descriptive Notes below.

Every subscriber to the *Agriculturist* for 1863, is invited to select three or four parcels of seeds from the list below.

These seeds are all valuable. Of the 63 kinds offered, many are comparatively new varieties, but we include some common, useful sorts for convenience of those without access to good seeds.

Most of them are annuals (reproducing seed the first season), and in all cases there will be enough to yield a supply of seed for future use. Our aim is to furnish the germs of future abundance in each locality where these seeds go.

Many of these seeds were grown by ourselves, the past year; the others are obtained of the best growers. The distribution will begin in February. A description is given in the next columns.

**Mode of Distribution.**—The seeds may be called for at the office, after March 1, or be applied for by mail at any time now, to be forwarded as soon as ready. The postage is only 1 cent per ounce under 1500 miles; and 3 cents per ounce when over 1500 miles.

Those sending for seeds to be forwarded by mail, will please carefully observe the following

**DIRECTIONS.**—(1) Select from the list below, any three or four parcels desired, and write plainly on a slip of paper the numbers (only) of the kinds of seeds wanted. (These numbers are used on our seed drawers, seed bags, etc.)

(2) Enclose the slip in a prepared envelope—directed in full to your own address (not John Smith's), and put on it postage stamps to the amount of one cent for each ounce of seeds to be enclosed, if to go under 1500 miles, or two cents if to go over 1500 miles. (Most places West of the Mississippi river are over 1500 miles.) N.B.—The total amount of stamps required can be reckoned from the table of seeds below. Any fraction over even ounces will need an extra 1-c. or two 1-cent stamps according to distance. Forward the above prepared envelopes to this office, in a letter, and the seeds will be enclosed according to the numbers on the slip. To save postage, let there be no marks on the envelopes except the address and stamps. About 2 ounces will go in a common sized envelope.

John Smith,  
Albia,  
Monroe County,  
Iowa.

### Field, and Vegetable Garden Seeds.

No.	Weight of package.
101—Mammoth Millet.....	About one-half ounce.
141—Darling's Early Sweet Corn.....	About one ounce.
186—Stowell's Evergreen Sweet Corn.....	About one ounce.
187—Conn. Broad Leaf Tobacco.....	Less than one-eighth ounce.
188—Genuine Havana Tobacco.....	Less than one-eighth ounce.
8—Daniel O'Rourke Pea.....	About one ounce.
9—Champion of England Pea.....	About one ounce.
12—Green Kohl Rabi.....	About one-fourth ounce.
145—Flat Dutch (Winter) Cabbage.....	About one-fourth ounce.
218—Early Sugar Leaf Cabbage.....	About one-fourth ounce.
191—Red Dutch Cabbage.....	About one-fourth ounce.
64—Extra early Round Turnip Radish.....	one-fourth ounce.
19—Round Spinach.....	About one-half ounce.
147—Neapolitan Cabbage Lettuce.....	About one-fourth ounce.
101—Improved Long Orange Carrot.....	About one-half ounce.
149—Extra early Bassano Beet.....	About one-half ounce.
95—Hubbard Squash.....	About one-fourth ounce.
193—Fejee & Italian Red Tomato.....	About one-eighth ounce.
154—Ice Cream Water Melon.....	About one-eighth ounce.
217—Fine Nutmeg Melon.....	About one-eighth ounce.
194—Hollow Crown Parsnip.....	About one-fourth ounce.
152—Fine Large Cheese Pumpkin.....	About one-fourth ounce.
17—Red Strap Leaf Turnip.....	About one-fourth ounce.
195—Early Short Horn Carrot.....	About one-fourth ounce.
196—Green Curled Kale.....	About one-fourth ounce.
198—Improved Purple Egg Plant.....	About one-eighth ounce.
197—Linneus Rhubarb.....	About one-half ounce.

### Flower and Ornamental Seeds.

60—Cotton Plant (2 kinds, mixed).....	One-half ounce.
111—Castor Oil Bean.....	One-half ounce.

On an average any five of the following varieties will go under one 1-cent stamp, or two stamps if over 1500 miles.)

300—Fancy Gourds, (mixed varieties) (Aa)*	204—Mixed G'n Poppy (Aa)
23—Mignonette, (Aa)	205—Mixed Fr'h Poppy (Aa)
30—Tassel Flower, (Aa)	206—Golden Straw Flower, (everlasting) (Aa)
31—Chinese Pink, (Aa)	210—Convolutus minor, (Aa)
27—Beautiful Zinnias, (Mixed) (Aa)	212—Fine Sweet Peas, (Aa)
49—Candytuft, (Aa)	219—Martynia in var. (Aa)
51—Drummond's Phlox (Aa)	230—Perilla Nankinensis (Aa)
183—Gilia nivalis, (Aa)	231—Striped Mirabilis (Aa)
134—Whitavia, (Aa)	27—Cockscomb, (Aa)
136—Long tailed Centaurea, (Aa)	223—Convolutus variegata, (Aa)
164—Sweet-scented Ageratum, (Aa)	216—Acroclinium roseum, (Aa)
169—Clarkia pulchella, (Aa)	132—Mixed Canterbury Bells, (Aa)
173—Mixed Larkspur, (Aa)	170—Evening Primrose, (Aa)
177—Graceful Quaking Grass, (Aa)	42—Foxglove, (Aa)
182—Sweet Alyssum, (Aa)	209—Dw' Blue Larkspur, (Aa)
183—Fine Mixed German Asters, (Aa)	233—Mourning Bride, (Aa)

\* (Aa), hardy annual; (AaA), half hardy annual; (AaB), tender annual; (AaC), half hardy biennial; (AaD), tender biennial; (AaE), hardy perennial; (AaF), half hardy perennial; (AaG), tender perennial.

### Descriptive Notes.

The notes below will afford some information upon the character and cultivation of the several plants, wherever the seeds may be obtained, and they should be preserved for reference in the Spring planting season. More full directions for the culture of these and other plants will, of course, be given from time to time, in separate articles. The Calendar of Operations, from month to month, will also suggest the time of sowing or planting. Most of the field seeds are necessarily in too small quantities for a crop, but with a little care in culture each parcel will produce a fair supply for a good-sized crop the next year. To avoid confusion, and save time by system, we shall not

begin the mailing until all seeds and parcels are ready, say the latter part of February, except those sent to very distant points.

For brevity, the Numbers are always used in putting up and sending out seeds, and subscribers are particularly desired to note this in their application. To avoid confusion, we use a new number for each addition, dropping the numbers of any seeds previously offered, but not retained in this list.

### Field and Garden Seeds.

No. 8.—DANIEL O'ROURKE PEA.—An early sort of fair quality, grows 2 feet high, and may be eaten in 40 or 45 days from planting. Sow from first to last of April, according to climate, or any time in May to multiply seed.

No. 9.—CHAMPION OF ENGLAND PEA.—A later, tall-growing variety. One of the very best; is our chief dependence for a table pea through the season. Sow as No. 8, or at intervals until July, if seed is plenty.

No. 12.—GREEN KOHL RABI, OR CABBAGE TURNIP.—The eatable part resembles a turnip, and grows above ground. Plant early in May, the same as turnips, and for table use boil the bulbs only while still tender. This is largely used for cattle and sheep in England.

No. 17.—RED STRAP LEAF TURNIP.—A very quick-growing variety of the flat Dutch sort, with a reddish or purple top. They are good for the table, while growing, and for stock during Autumn and early Winter. Sow in drills from the first of April to August.

No. 19.—ROUND SPINACH.—The best for Spring and Summer greens. Sow in good soil in drills 15 inches apart and thin to 8 inches in the rows.

No. 64.—EARLY TURNIP RADISH.—A quick-growing round sort, crisp and sweet. Sow at any time after frost is out in early Spring, and at intervals until September. If the early sowings are allowed to go to seed, a second crop may be raised from this seed the same season. It always reproduces seed the first year.

NS. 95.—HUBBARD SQUASH.—The best Winter Squash we have tried. Keeps until Spring. Plant middle of May. Color, light bluish green, hard shell, rich, dry flesh. It is good also for Autumn use, even when cooked green.

No. 101.—IMPROVED ORANGE CARROT.—A fine yellow variety, suitable for the table and for stock. Sow early in May, on deep, rich soil, in rows 15 to 18 inches apart.

No. 141.—DARLING'S EARLY SWEET CORN.—We have tried many other sorts, but come back to this, as combining sweetness and early maturity. It is quite small in stalk and ear, and may be planted in hills or drills 2 to 2½ feet apart, unless other crops are put between the rows to occupy the ground after this is out of the way, which will be before mid-summer, if planted early. It may be planted all Summer for a succession.

No. 145.—FLAT DUTCH CABBAGE.—A Winter sort extensively grown for market, frequently under the name of "drumhead." The heads are large, and require to be 2 feet apart, in 2½ feet rows.

No. 147.—NEAPOLITAN CABBAGE LETTUCE.—A large solid sort which has proved valuable. Sow at any time in April, May, or June, covering seed lightly. Leave best plants for seed, which is produced the same season.

No. 149.—EARLY BASSANO BEET.—Fine quick-growing, turnip-shaped for early use. Sow in drills 1 foot apart.

No. 152.—LARGE CHEESE PUMPKIN.—One of the best for general culture. A large, flat, cream-colored variety, sweet, and good keeper. Plant middle of May, allowing ample space for them to run.

No. 154.—ICE CREAM WATER MELON.—One of the best sorts, sweet and tender. Plant in open ground about the middle of May; can be started earlier in hot-bed.

No. 186.—STOWELL'S EVERGREEN SWEET CORN.—A much larger variety and slower grower than No. 141, remains in the milk a long time, hence called evergreen. Good for later table use, and for fall drying. If to be ripened for seed, plant early; for table use, from May 15 to June 20, hills or drills 3½ to 4 feet apart.

No. 187.—CONNECTICUT SEED-LEAF TOBACCO.—One of the best for Northern culture. A thimble full of seed will furnish plants for an acre. Sow in a sheltered seed-bed about the middle of April, and plant out middle of June, on rich dry soil, 3 feet apart each way, or 3½ feet, by 2 feet, to facilitate working with a horse hoe. For after treatment, see last volume of *Agriculturist*.

No. 188.—HAVANA TOBACCO.—Treat as No. 187, save that it requires a little less room.

No. 191.—MAMMOTH MILLET.—An annual, very productive in seed and foliage. Cut green it makes good

hay, or left to ripen, the straw is good, and the seed valuable for stock and poultry. Sow thinly half an inch deep, at any time in May.

No. 193.—FEJEE, CALLED ALSO ITALIAN TOMATO.—Large, smooth and solid, the best we have grown. Sow in hot-bed, April 1st, or 1st of May, in open ground.

No. 194.—HOLLOW CROWN PARSNIP.—A large, sweet variety, with a depressed crown. Sow in deep, rich soil, early in May, in rows 18 inches apart, covering lightly.

No. 195.—EARLY SHORT HORN CARROT.—A fine yellow variety for early table use. Sow in light soil, last of April or first of May, in drills 1 foot apart, covering lightly.

No. 196.—GREEN CURLED KALE OR BORECOLE.—A kind of cabbage which does not head. The whole top is boiled for greens, usually in Spring, as it bears standing out over Winter, with (and often without) a slight covering of straw or brush. Treat the same as late cabbages.

No. 197.—LINNEUS RHUBARB.—Sow in deep mellow soil in April or May, covering ½ inch. Keep well hoed, and transplant the following Spring when a few stems may be pulled for cooking. A full crop can not be had until the 3d year, on which account it is better to purchase and plant roots, when they can be had. It furnishes a fine material for early sauce and pies, and should be in every garden. We have a fine lot of pure seed, as noted last month. In a few instances last year's seed sent out by us, appears to have produced new varieties that may prove even an improvement upon the original good variety itself.

No. 198.—PURPLE EGG PLANT.—Sow in a hot-bed, early in April, and plant out 18 inches apart, the middle of May, or after all danger of frost is over. It is still better, sown in, or transplanted into small pots, keeping them under glass until June, when they may be transferred to the soil, without disturbing the roots.

No. 199.—RED DUTCH CABBAGE.—Highly valued for pickling and for "cold slaw." Heads small, sugar loaf form, and solid. Set plants 15 to 18 inches apart each way. Its color is fancied by most persons.

No. 217.—FINE NUTMEG MELON.—One of the best sorts. May be planted in the ground after the soil becomes warm, but may be obtained much earlier if the seeds are started in a hot-bed upon pieces of soils, and these planted out in well manured hills 6 or 8 feet apart.

No. 218.—EARLY SUGAR LOAF CABBAGE.—We have found this to be one of the best early varieties; it forms a good sized head of excellent quality. Start in a hot bed for the earliest and in the open ground for succession.

### Flower and Ornamental Seeds.

No. 23.—MIGNONETTE (*Reseda odorata*).—An annual in this climate. The flowers not conspicuous but yield a rich odor. Its habit is low, branching upon the ground; flowers profusely from midsummer until frost; sow in pots for winter blooming. A great favorite. Sow as early as the ground can be worked—the seed is long in coming up.

No. 27.—COCKSCOMB (*Celosia cristata*).—A very curious and common annual, native of the East Indies. Flowers in fantastic, irregular spikes, inclining to the fan-shape, like the comb of the cock, and of the richest crimson color. Sow in rich soil, early, and thin to 18 inches apart.

No. 30.—TASSEL FLOWER (*Cassia coccinea*).—Called also "Venus' Paint Brush." A delicately beautiful annual, growing 1 to 2 feet high, and blossoms freely. The scarlet flowers are perfect little tassels, very bright and pretty. Sow in May, thin out or transplant to 6 or 10 inches.

No. 31.—CHINESE PINK (*Dianthus Sinensis*).—A very pretty little annual of this fine class, most of which are perennials. It is not fragrant like the Sweet William, nor does it grow in clusters. Color varies from maroon and crimson with pink edging, to white with a red center. They flower for many weeks in succession; desirable in every flower plot. Sow in early Spring. The roots frequently survive the Winter.

No. 37.—ZINNIA, (mixed) (*Zinnia elegans*).—This beautiful Mexican plant is a brilliant addition to the flower garden. It is tall, elegant and showy, with flowers of many colors, purple, crimson, orange, scarlet, violet and white. Sow middle of May, keep plants 18 inches apart.

No. 42.—FOXGLOVE (*Digitalis alba, purpurea, etc.*).—A perennial, blooming the second year from seed. The flowers are very pretty, often beautifully mottled with purple and brown spots. It blooms upon a spike 2 to 4 feet high, beginning at the bottom, and continues for several weeks. The medicine digitalis is the leaf of this plant. Sow in early Spring. The roots often die out after flowering a year or two.

No. 49.—CANDYTUFF (*Iberis umbellata, and amara*).—Suitable for massing or for borders. An annual with



clusters or umbels of small flowers, of various colors, from pure white to purple. Grows 6 to 12 inches high, and blooms most of the season. Sow early in Spring.

No. 51.—**DRUMMOND'S PHLOX** (*Phlox Drummondii*).—A very beautiful annual, the delicate flowers of which exhibit a very great variety of markings. Grows 12 to 18 inches high, requires little care, blooms constantly, and is beautiful in masses. Sow early in May.

No. 89.—**COTTON PLANT** (*Gossypium herbaceum* and *Barbadense*).—The Upland, with a little Sea Island Cotton Seed, both in the same package—the Upland downy, the Sea Island naked. The Upland, sown in the Spring, and protected from frost, will mature its bolls in the Autumn, south of 40° or 41°, but will bloom wherever corn succeeds. The plant grows 3 feet to 5 feet high; the flowers are showy—bright yellow, with purple eye. Sow at corn planting, in drills, and thin to 18 inches apart. Our parcels are designed for ornamental and small experimental plots.

No. 111.—**CASTOR OIL BEAN** (*Ricinus communis*).—A stately plant, 5 to 10 feet high, with broad tropical foliage, which is showy and beautiful. It is a very rank grower, and needs a rich, warm soil. Sow in the open ground, and leave 3 to 6 feet apart.

No. 122.—**CANTERBURY BELL** (*Campanula media*).—Showy, flowering the second year from seed, and sometimes living 3 or 4 years. They bloom along a spike 2 to 3 feet high; flowers of perfect bell shape, large, and in some varieties double; white, lilac, blue, and intermediate shades. Sow any time in May or June, and transplant in the Fall to 1 foot apart in rows, or set in groups.

No. 123.—**GILIA** (*G. nivalis*).—An annual of 1 foot in height, delicate growth, and finely divided leaves; flowers usually white, growing in panicles. Good for massing. Sow early in Spring.

No. 124.—**WHITFLAVIA** (*W. grandiflora*).—This California annual pleases us much, blooming 5 to 6 weeks from sowing, and continuing until October. Its blue, bell-shaped flowers resemble the Campanulas. Sow early in May, and thin to 6 inches apart; grows 1 foot.

No. 126.—**LONG-TUBED CENTRANTHUS** (*C. macrostemon*).—An annual of rather delicate appearance, but hardy and desirable. Flowers fasciated, (in bundles or clusters,) tubular, borne on stalks 10 to 12 inches high. Bloom until frost. Sow early, and thin to six inches.

No. 164.—**SWEET SCENTED AGERATUM** (*Ageratum Mexicanum*).—A pale blue or white annual, desirable for bedding or massing. The plants may be taken up in the Fall and put in the conservatory or hot-house where they will flower during the Winter. Sow early in Spring.

No. 169.—**BEAUTIFUL CLARKIA** (*Clarkia pulchella*).—A hardy Rocky Mountain annual, growing 1 foot high. Flowers, light purple, opening from June to Sept. Sow about the first of May. A good border flower.

No. 170.—**EVENING PRIMROSE** (*Oenothera biennis*, *macrocarpa*, etc.).—Fine biennials which are not sufficiently known. Most of the species are low, with light yellow flowers, some of which are 4 or 5 inches in diameter, and expand in the evening, whence the name. Sow in May and transplant in October, setting 3 feet apart. Some species have a white bloom.

No. 173.—**MIXED LARKSPURS** (*Delphinium consolida*).—Annuals of white, rose, pink, blue, and variegated colors, growing from 2 to 3 feet high. Some of the species are double and very pretty. Flowers in spikes for a long time in succession. Sow very early, as the seeds lie long in the ground; they are very hardy.

No. 177.—**QUAKING GRASS** (*Briza gracilis*).—A beautiful nodding grass, growing 3 feet high. The heads or panicles resemble the rattles of the rattlesnake, and dry so as to be very ornamental in bouquets of dried flowers. Sow in early Spring.

No. 182.—**SWEET ALYSSUM** (*Alyssum maritimum*).—An annual, nearly 1 foot in height, flowering in long racemes, from June to November, or until killed by frost. Sweet-scented; flowers white. Sow in early Spring, and thin to 1 foot apart, unless massed, for which it is well suited.

No. 183.—**IMPROVED FRENCH AND GERMAN ASTERS**.—A beautiful hardy annual. The common "China Asters" give no idea of the beauty of these improved varieties, some of which are nearly as large as Dahlias, and very double. We have grown nearly half an acre for seed for distribution, though from the little seed in perfect flowers, the parcels are necessarily small. Sow in open ground in May. They bear transplanting to any desired position.

No. 200.—**FANCY GOURDS** (*Lagenaria vulgaris*, in var.).—Cultivated for the singularity or beauty of the fruit; vines climbing. Plant like cucumbers, near a trellis, or provide poles; protect against insects. Our seed consists

of all the seeds from the prize collection of 75 varieties exhibited at the recent show at the *Agriculturist* office. They were necessarily mixed for general distribution.

No. 203 and 204.—**GERMAN AND FRENCH POPPIES** (*Papaver somniferum* and *Rhaas fl. pl.*).—Of these common yet very showy species there is an infinite variety in form and color. The culture is simple. Sow in beginning of Spring, thin out to several inches apart; bloom in July.

No. 205.—**DOUBLE FRENCH MARIGOLD** (*Tagetes patula*).—A very showy annual of 2 or 3 feet high; flowers bright yellow to dark brown, and often beautifully striped and margined. Sow first of May; blooms from July to frost.

No. 206.—**GOLDEN STRAW-FLOWER** (*Helichrysum bracteatum*, etc.).—One of the most common of the "immortelle" or everlasting flowers: blooms yellow, white, pink, and scarlet. Grows 2 or 3 feet high. Sow in borders in May. Pick flowers before expanded, for Winter bouquets.

No. 209.—**DWARF BLUE LARKSPUR** (*Delphinium formosum*).—A fine herbaceous perennial, blooming first season, 18 inches high; flowers ultramarine blue, very rich; blooms July to September. Sow early in May.

No. 210.—**DWARF MORNING GLORY** (*Convolvulus minor*).—A very showy annual, growing 14 to 20 inches high; the funnel shaped flowers, blue, white and yellow. Sow early in May. Blooms from June to October.

No. 212.—**SWEET PEAS** (*Lathyrus odoratus*).—A familiar annual, valued for the remarkable sweetness and beauty of its flowers. Its habit, mode of flowering, etc., is much like the garden pea, but it is much more delicate. The flowers are of many bright colors, (red, white and blue,) beautiful in bouquets.—A great favorite. Sow early, in good soil, seeds 2 inches apart; requires brushing; grows 2 to 6 feet high.

No. 216.—**ACCROCLINUM** (*A. roseum*).—An everlasting flower. Grows 1 to 2 feet high; flowers rose-color, very pretty. Sow middle of May, in sandy loam, or grow in pots and turn out into the open border first of June. In stiff soil, make drills, and cover lightly with sandy soil.

No. 219.—**MARTYNIA** (*M. proboscidea*, etc.).—This, sometimes called "Buffalo Horn," from the form of the pod is a vigorous annual about 2 feet high, of a spreading habit and rather coarse foliage. The flowers are shaped somewhat like those of the foxglove, of various colors and very showy. The curiously shaped fruit makes very good pickles if taken while tender. Sow in good soil after all danger of frost is over and leave the plants about 3 feet apart.

No. 220.—**NANKIN PERILLA** (*Perilla Nankinensis*).—A hardy annual cultivated for its singular foliage which is of very beautiful dark purple color, and makes a fine contrast with other flowers in the border.

No. 221.—**STRIPED MIRABILIS** (*Mirabilis Jalapa*, in var.).—The new varieties are a great improvement on the old Four o'clock. The plants grow 2 to 2½ feet high. The long fleshy roots may be taken up after the frost has cut down the plant, and preserved like Dahlias to be planted the following Spring.

No. 222.—**CONVOLVULUS VARIEGATA**.—A low twining variety remarkable for its beautifully variegated foliage. Flowers purple. Should be started in pots and put out in the ground in settled warm weather.

No. 223.—**MOORING BRIDE** (*Scabiosa atropurpurea*).—A hardy perennial which blooms the first year, if planted early. Leaves divided; flowers dark crimson purple, rose-colored and white.

### Death of a Prominent Agriculturist.

Our foreign exchanges bring the mournful news of the death of Mr. Jonas Webb, of Babraham, England, whose name has so often appeared in these columns as one of the most noted and successful breeders of stock, particularly of South-Down sheep. For forty years Mr. Webb made the improvement of these animals a constant subject of study and experiment, and by his skill raised his flock to a grade that gave them a world-wide reputation. America and Europe acknowledge him as a public benefactor. His success in improving sheep has given additional value to whole provinces. It was our good fortune to enjoy several pleasant chats with him at the Royal Agricultural Show in London last Summer. We found him daily at his post, describing the merits of his four magnificent Short-Horn cows, on the good points of which he was all enthusiasm. His tent was the center of attraction to multitudes of stock breeders from all parts of Europe. Mr. Webb was 66 years old on the day of his decease. The circumstances attending it were particularly painful. The death of his wife was an overwhelming blow, under which he sank on the evening of her funeral, and on the day set apart for the marriage of his son.



Containing a great variety of items, including many good Hints and Suggestions which we give in small type and condensed form for want of space elsewhere.

**No More Premium Maps.**—Letters continue to come in daily, asking for premium Maps. Our offer was distinctly limited to the end of November. We stated in the December *Agriculturist*, that owing to the increased cost of our own paper, and the higher price of the Maps, we could no longer afford this premium, though we have continued to send them when asked for by those living too remote to apply before the close of November. We repeat, that except in special cases, and for strong special reasons, no more Maps can be given. The price is 25 cents each for the large map of Virginia and that of the Southern States, and 50 cents for the map of the United States, including the Canadas and New Brunswick. When desired at these rates, we will procure and send them post paid by mail.

**Premiums—Last Call (?)** We publish our premium list in full this month, probably for the last time, though all the offers will be continued until further notice—how long we can not exactly tell, as it will depend upon the future price of printing paper. Those who wish to get any of our valuable premiums will do well to set about it at once. There is yet time to fill up the lists already commenced and to start new ones. A good article can be easily obtained now, without outlay of money.—N.B. It will be seen, that the terms of two or three articles are slightly changed, owing to the advance in their market price.

**Fruit Grower's Meeting—Change of Hour.**—The time of meeting on Thursday of each week will hereafter be at one o'clock P. M. These meetings will be found the source of much valuable information. Leading practical growers are always present to describe the best kinds of fruits, the modes of planting, culture, etc., with other topics of interest relating to the orchard, garden, etc. All interested are invited to attend.

**Buy your Books now.**—Like everything else depending upon the price of paper (except the *Agriculturist*) the prices of books have advanced from 25 to 50 per cent. Anticipating this rise, we laid in a partial stock of those most called for from our office, and these stand at the old price in our list on page 30. Persons wishing any of these books will do well to apply for them at once, as our price list must be advanced to that of the publishers, as soon as the present supply runs out. It will be seen, that a few books in our list are already advanced a little. Persons calling for premium books will please note the changes from time to time, as we must be governed by the rates announced each month.

**Honest Postmasters.**—Almost every day we get letters containing subscription money, but unsealed, some of them from California even. We are happy to announce the safe arrival of so many such letters, but would advise, for the sake of keeping Postmasters honest, and especially when gold dollars are enclosed which might drop out in the mail bags, that all money letters be securely sealed.

**Town Hedges.**—J. W. Bucher, Northumberland Co., Pa. If to turn cattle, use heavy Locust or Buckthorn. For a screen simply, we prefer the Arbor Vitae. In both cases it is advisable to buy plants from nurserymen or hedge-plant growers, who sell them cheaply by the 100 or 1,000. The American Arbor Vitae is best for quick growth and cutting to any desired form. The Siberian variety grows slowly in seat, cone-like form, and is beautiful when planted singly or in close rows to form a compact screen or hedge.

**"Agriculturist" Wanted.**—William Beal, Lennawee Co., Mich., writes that one of his neighbors who takes no agricultural paper, recently sold a flock of sheep enough below their value to have paid for the *Agriculturist* the remainder of his life. He was not "posted" as to the market. The reading of a single article in our number for November, would have saved him all his loss. This is a sample of many similar testimonials recently received.

**To Advertisers.**—One who has advertised his business very extensively in most parts of the country, writes that, "the *American Agriculturist* did me as much good as all the other papers together."

**Small-pox in Sheep.**—This is reported to have been quite prevalent of late in England, and to prove the efficacy of vaccination, the Government has purchased 200 sheep to experiment with. They propose inoculating a portion of them with the virus direct from the cow.

**Poultry Profitable.**—Mr. R. W. Davey, of Middlesex Co., Mass., in a letter to the *American Agriculturist*, says he finds it pays well to give poultry warm quarters with plenty of feed. He reports the cost of keeping six fowls 11 months, from January 1st, to December 1st at \$6.04. The returns were: 551 eggs at 16½c. per doz. \$7.66. Poultry sold, \$4.70. Fowls added to stock, \$1.50; total \$13.86—a net profit of \$7.82, or more than \$1.25 for each fowl. This is certainly a very good showing on a small scale. Mr. D. justly attributes this success to the care bestowed upon his poultry, which he does not include in reckoning the cost.

**The Hens Do Lay.**—"A Constant Reader" writes: "I have 21 hens, good layers, but they entirely ceased giving eggs in the latter part of Summer. Acting upon a hint in my *American Agriculturist*, on Oct. 1st, I sent to the soap-fat triers, and got a 50 pound cake of scraps at one cent per pound, and placed it in a clean corner of the barn-yard. The hens, though abundantly supplied with grain, pitched into the scrap cake as eagerly as a boy would into a pound cake, though they found it hard work to get off much of the substance until after a rain had soaked it. Two weeks after, the eggs began to be dropped, and now how they do lay! We have kept no account, but we must have got a dozen and a half a day for some time, as we have consumed all we could eat in the family, and have sold a surplus of 10 dozen at the rate of five for a shilling, or \$3, which I enclose herewith for three copies of the paper for myself and two friends, as named below. The eggs eaten at home more than paid for the meat (not yet half gone) and the other feed."

**How Much Grain for Fowls?**—C. N. Bement, writes to the *American Agriculturist*, that he has ascertained by actual experiment, that in the months of December, January and February, a common sized fowl will consume on an average one gill per day of corn, barley, or buckwheat, if permitted to take it at pleasure.

**Fowls Changing Color.**—E. P. Berrian, Westchester Co., N. Y., writes that he has a 2-year old black Spanish hen, which was originally a jet black, but during the last six months she has been changing her coat, and is now almost entirely white. He asks the *Agriculturist* readers to account for the phenomenon.

**Age of Poultry.**—C. N. Bement, writes to the *American Agriculturist*, as follows: "It is easy to judge of the age of a plucked fowl by the state of the legs. If a hen's spur is hard and the scales on the legs rough, she is old. Examine the head also. If the under bill is so stiff that it can not be bent down, and the comb is thick and rough, leave her, no matter how fat or plump, unless a tough case is preferred. A young hen has only the rudiments of spurs, the scales on the legs smooth, glossy, and fresh-looking, whatever the color may be; the claws tender and short, the nails sharp, the under bill soft, and the comb thin and smooth.—An old goose when alive, is known by the rough legs, the strength of the wings, particularly at the pinions, the thickness and strength of the bill, and the fineness of the feathers; and when plucked, by the legs, the skin under the wings, by the pinions and bill, and the coarseness of the skin. Ducks are distinguished by the same means, with this additional mark, that a duckling's bill is much longer in proportion to the breadth of its head, than the bill of an old duck."

**Oyster Shells for Poultry.**—H. A. Slater, Hartford Co., Conn. These broken fine are as good or better than slaked lime; they answer in part for gravel, as well as lime.

**Thanksgiving Turkey Sacrificed.**—A subscriber (Pliny N. Ward), of Worcester Co., Mass., in renewing his subscription to the *American Agriculturist* for 1883, writes: "....I know of no agricultural publication equal to yours in several respects. Its rich vein of sound, practical, common sense, causes its perusal to do good like a medicine; and I should wish for its monthly visits if I did not own a single foot of land, for its moral and religious influence. You will believe my statement above, when I assure you that, our Thanksgiving Turkey was sold to obtain the dollar heretofore forwarded." (Such kind appreciation, and this letter is only a sample of many, is certainly a strong stimulus to increased effort on the part of the Editors.)

**"Egyptian Sorgho or Imphee."**—M. Beck, writes to the *Agriculturist* from Wayne Co., O., that he planted 17 rods of what was called Egyptian sorgho there, on a rich clay soil, rows two feet apart, and

canes 4 to 5 inches distant, which grew luxuriantly and ripened in October. The juice evaporated on Cook's pan, yielded 40 gallons as fine syrup as he ever saw. This was at the rate of 375 gallons per acre.

**Barley—Weight of a Bushel in Me.**—On page 375 of December *Agriculturist*, the weight of barley given at 56 lbs., is a typographical error; it should have been 46 lbs.

**Prolific Bean.**—S. G. Willard, Windham Co., Conn., says, a subscriber to the *American Agriculturist* in that County raised 326 merchantable beans of a large, white, running sort, from one seed trained on a pole 5 feet high. He thinks the "*Agriculturist* did it."

**Northern Cotton—Specimens lately Received.**—Ten pounds of Upland, well grown, but rather short staple, from Rev. J. A. Bent, Washington Co., Ill.—Small samples from 6 pounds of two varieties, grown by G. D. Furber, Macoupin Co., Ill., from seed sent out by the *Agriculturist*. Both of these (Upland and Sea Island,) are well-grown and fine.—Specimen long staple from H. Davison, Defiance Co., O., grown from Alabama seed, which proved too late for that climate.—Also specimen of short staple, fine fiber, from J. G. Stackpole, Meigs Co., O., from plants growing five feet high.

**Silk in Ohio.**—From the Census report of 1860, we learn that 2,166 pounds of cocoons were produced in Ohio that year. Michigan comes next, that State being credited with 1,043 pounds. Correspondents who have frequently asked where they can obtain eggs, will doubtless find them by addressing prominent agriculturists in those States.

**Tree Cotton Seed.**—Mrs. B. Davis, Ash-tahula Co., O. There is none of this seed that we know of, to be had in this country. The parties who set forth the wonderful merits of the plant a few months since, proved unreliable, disappointing many parties who had paid money for the seed.

**Sweet Potatoes Profitable at the North.**—Several years of experience, always successful, and a great many reports from those who followed our advice last Spring, and tried them, fully confirm the belief that it pays well to cultivate at least a small plot of sweet potatoes for home use, in any garden south of latitude 42°, where a light warm soil can be had, and even further North in favorable localities.

**Cesspool Slops.**—W. Gilbert, N. Y. Cesspool slops are among the most valuable, especially if the chamber slops are added, or water closet pipes enter into the cesspool. Clean out frequently, mixing the contents with muck, and a rich compost will be formed.

**Salt Preserves Timber.**—Asa M. Holt, Middlesex Co., Conn., writes to the *Agriculturist* that he built an out-cellar in 1828, covering the roof with sawed chestnut timber laid from the ridge pole down over the rafters. Upon this was put three feet of earth, with an outer roof of pine boards to turn rain. The roof lasted ten years, and then fell in. He then had a similar roof put on by the original builder, but before covering with earth, a bushel or more of coarse salt was sown over the timber roof. This last roof has been on 24 years, and bids fair to last some time longer.

**Hardy Apples in Minnesota.**—H. D. Ives, Wapello Co., Iowa, referring to an item with the above head on page 288, August *Agriculturist*, says the Roxbury Russet bursts its bark in their prairie soil, and is tender beside. The same is true of the Baldwin and R. I. Greening, though in a less degree.

**Vicar's Improving.**—"Don't touch the Vicar's," was the advice of an old woman who has sold pears in Washington Market for the past ten years, to a person about negotiating for some of this variety. "They won't sell," added she. True, as ordinarily grown and ripened, they are uninviting to sight or palate, but as offered at the *Agriculturist* Fruit Growers' Meeting, they were really good. The secret lies just here. Thin the fruit while growing, pick late in the season, handling with care. A little frost don't hurt them. Put in a barn or other building for a week, to sweat, then take to a cool cellar, and if packed in cut hay, oats, or oat chaff, all the better. Two weeks before wanted, bring them to a warm room—say 65° to 75°—and they will often color up finely, and if they are not No. 1, they are more than good, at a time when very few pears of any kind are to be had.

**Ignoramus Quince.**—Such is the label on a very fine specimen of pear quince on the *Agriculturist* tables, which has a history. A progressive farmer in New Jersey asked his neighbor why he was cutting

down his quince trees. The reply was, they were worthless, and he could not succeed in raising quinces. Our friend advised him to take the *American Agriculturist*, where he had seen good directions for growing quinces. But he did not want any "book fudge." "I left him, but took away a few twigs of his quince trees, cut from the brush heap, and treating the cuttings and the trees they produced according to the directions given by 'book fudge,' I now have as fine healthy trees as one could wish, from which I picked the specimen here sent, and some 60 other fine quinces. I have shown the trees and fruit to 'Ignoramus,' and if he don't come down with the dollar, I think he will get a present."

**Prune the Grape Vines Now.**—Don't leave them so late that the pressing sap in the Spring will force its way through the partially hardened cut. We much prefer November and December, or at latest, January for the annual trimming. Prune judiciously, cutting out to within one eye, the last bearing cane or shoot, where the renewal system is followed, and taking out a portion of the old wood of old vines allowed to ramble over an extensive trellis, or on the side of a building. The new growth should also be shortened in somewhat, bearing in mind, however, that this is to be the next fruiting wood.

**Delaware Grafts.**—J. Borland, Bucks Co., Pa., in a letter read at the *Agriculturist* Fruit Growers' Meeting, says he raised Delaware grapes from grafts inserted in old roots. He advises laying an old vine in a trench early in Spring, and graft by splitting it at intervals, and running the wedge of an ordinary graft perpendicularly through this split; then cover with 3 to 4 inches of earth, leaving one bud out of ground.

**What Grapes to Plant.**—This is a puzzling question to the amateur, even, and much more so to a novice. In order to settle the question, the Fruit Growers' Meeting have appointed a judicious committee to bring in lists, from which, after discussion, probably for weeks, a selection will be made and adopted as the Society's list.

**Grafting Large Plum Stocks with Apricots.**—J. Webster, Marion Co., Ill. Better graft in the branches, if the trees are three inches through. Small seedlings of one or two years' growth are best budded close to the ground.

**"A Pomological Congress of Nations"** is announced in the *Revue Horticole* to be held at Namur, Belgium, Sept. 28, 1883, to which delegates are invited from all countries. The special object is to form a standard nomenclature, which will prevent a great deal of confusion, and not a little loss, especially to our own nurserymen and fruit growers, who often import, at a heavy expense, what they already have growing under another name.

**Fruit Growers' Magazine.**—E. Newberry, Evansville, Ind. There is no periodical in this country devoted wholly to fruit growing, and none giving more space to this subject than the *Agriculturist*.

**Good Currants.**—A. A. Davison, Mason Co., Ill., says he picked 128 quarts of Red Dutch currants from 33 bushes, some of which were too young to bear a full crop. The older ones bore 6 to 8 quarts per plant.—From one three-year old Houghton's Seedling Gooseberry bush he picked 3 quarts of fruit. This will do for a beginning, but a much larger yield may be looked for.

**Brush for Scraping Trees.**—We have lately seen a brush made of metal instead of hair, for cleaning trees of moss and dead bark. It is a French device, which Yankee ingenuity could improve upon. But a house broom, cut off to a stub, answers very well. Follow this up with some alkaline wash.

**Fruit Talk 280 Years Ago.**—"The names of apples which I had ther graffes from Brintenarch, from one Mr. Pace: Item, the apple out of Essex; the Lether-cot or Russet apple; the London pippin; the Ken-greot, or the Croke; the glass apple or pearmain; the red stear; the Nemes apple or grenling; the Bellebone; the apple out of Dorsetshire; the Domine quo vadis; the Paces pear;" etc. etc. (Extract from the Common Place book of John Trevelyan, of Somersetshire, 1582.)

**Flowers from Vermont.**—Miss A. M. Allen, Lamotte Co., Vt. Your "Eupatorium" is *Veronica Virginica*. "Fall Crocus" is *Colchicum autumnale*, or meadow Saffron, while the bulbous rooted flower proves to be *Ornithogalum umbellatum* or Star of Bethlehem. The white flower is probably *Achillea Ptarmica*. "Siberian Ash" is *Pyrus Americana*, and "Lady of the Lake" we judge from the specimen to be *Physostegia Virginiana*.



**Keeping Butter.**—George W. Pomeroy, Montgomery Co., Pa., says he tried the recipe of D. E. Smith, given by a subscriber in the *Agriculturist* on page 138 of last volume (May No.), and injured his butter thereby. The recipe says: "Work May or June butter two or three times, adding at last working one grain saltpeter and a teaspoonful loaf sugar to each pound of butter. Pack in stone jars to within two inches of top, and fill with strong brine, cover tightly and bury in a cellar bottom." Has any one else tried it?

**Steamed Carrots for Cows.**—M. S. Wickersham, Philadelphia, Pa., writes to the *American Agriculturist*, that his cow has improved in yield of milk since commencing to feed steamed in place of raw Carrots. We believe cooked roots to be best for feeding; the question not yet fully decided is, whether the cost and additional labor will be repaid by increased thrift of the animal.

**Sawdust in Stables.**—Rhode Island will find by referring to volume 18, page 357 (1859) of the *Agriculturist*, that his suggestion is not a new one. We are glad to receive his testimony, that it makes a clean and comfortable bed and greatly increases the value of the manure by absorbing the liquids.

**No Use for Manure.**—J. H. Hayes, Carroll Co., Ind., writes to the *American Agriculturist*, that its teachings on the general use of manures are valueless in that region, because the land is already rich enough to yield 80 bushels of corn and 25 to 40 bushels of wheat per acre. Just so it was once on thousands of acres in Virginia, where now the land will scarcely bear the shadow of grain. Manure is needed at the West, to keep the land good. It is true that not so much will be required, as where by neglect of manuring the soil has become sterile; but sooner or later all land not fed will grow lean, and so will its owners' pockets.

**Flowing Swamp Land.**—H. G. Chamberlin. Land covered with muck, like yours, will not be benefited by flowing, unless it is planted with cranberries. It would injure the tame grasses of mowing lands to allow water to stand on them for a few days even. Cranberry lands may profitably be covered with 6 inches of water from the middle of Nov. to the middle of April.

**Sorghum Seed.**—Wm. Fulke complains, as do many others, of the difficulty of procuring good seed. Sorghum and its allies are merely sweet varieties of the common Broom Corn, just as Sweet Corn is a variety of Indian Corn, and, like that, is liable to lose its peculiarity or "run out." Experiments are needed to determine the mode of cultivation which shall perpetuate or even improve the variety. Here is a useful and profitable field for some one, for we cannot afford to import our seed each year. Who will try?

**American Jute.**—This name has been given to a fibre prepared by a process patented by W. S. Cantelo, from the *Hibiscus Moscheutos*, or Swamp Rose Mallow. The plant grows native on our salt marshes or river banks near the coast, and around salt springs. It throws up numerous stout stems 4 or 5 feet high, which bear large rose-colored flowers, much like those of a single Holyhock. It belongs to the Mallow family, the plants of which are remarkable for their tough bark. The Cotton plant belongs to the same family. It is claimed that three and a half tons of fibre, fit for manufacturing paper, and worth \$100 per ton, can be raised from an acre. Should this statement be only partially true, much land that is now unprofitable could be devoted to its culture.

**Materials for Making Paper.**—The scarcity of Paper stock has led to experiments upon various vegetable fibers, some of which we have noticed in other items. The fiber of the wood of the Linden, or common Basswood, has been for some time successfully used. A patent has recently been obtained for making Paper from corn husks. The common Life Everlasting (*Gnaphalium polycephalum*) has been converted into tolerable Paper, and we notice that in England the common "Eel-grass," (*Zostera marina*) is proposed as a material for the same purpose. This latter is found abundantly along the coast, and is often incorrectly called Seaweed, the latter being an entirely different plant. It is used to some extent to fill mattresses, cushions, etc.

**A Troublesome Weed.**—W. M. B., Tippecanoe Co., Ind., should have sent a specimen of the plant which causes so much trouble. It cannot be the common Wild Morning Glory, which grows in low, moist ground, and which we never have seen disposed to

encroach upon cultivated land. Perhaps the plant is the European Blind Weed, having a perennial, creeping root by which it spreads rapidly. It is a mistake to suppose that particular weeds can be killed by some specific application, as that which will destroy weeds will also kill useful plants. Like other evils, prevention is easier than cure. The most obstinate weeds are easily eradicated when young, but when they once get possession of the soil, the task becomes very difficult.

**The Cultivation of Peppermint.**—"A Subscriber," Butler Co., Iowa, thinks Peppermint might be cultivated with profit, if there were a regular and steady demand for the oil. The plant has been profitably cultivated in St. Joseph Co., Michigan, which has during the last ten years produced the largest portion of the Oil of Peppermint used in the world. Not only our own country, but Europe has been largely supplied from this quarter. The product varies greatly in different seasons, and the price fluctuates accordingly. The amount of Oil produced per acre ranges from 7 to 20 pounds, and the price from \$1.25 to \$4.00 per pound.

A detailed account of its culture may be found in the proceedings of the American Pharmaceutical Association for 1858.

**California Milkweed.**—T. J. D. sends us from Sacramento the pods of a species of Milkweed, (*Asclepias*) suggesting that it may be useful to paper-makers. In the absence of leaves, we are unable to identify the species, but the pod much resembles that of the common milkweed, *Asclepias incarnata*. The hairs or down upon the seeds of the various species of Milkweed are among the articles which have been proposed as a substitute for the ordinary kinds of paper stock. We are not aware that any experiments have been tried with it, but doubt whether it has sufficient strength of fiber.

**Ginger Root—To Several Inquirers:**—Ginger is a tender plant and will not stand our winters, though it may be grown in the open ground, by taking it into the Green-House during Winter, and giving it plenty of water.

**"Live for Ever."**—*Sedum Telephium*.—This plant, known also as Orpine and Aaron's Rod, is reported by a subscriber in Connecticut, to become a troublesome weed in some localities. If any of our readers have had any experience in exterminating it we shall be glad to hear from them.

**Propagating from Diseased Trees.**—F. G. Wilson, New London Co., Conn. Experienced nurserymen object to propagating by grafting with clones from diseased trees.

**Trees vs. Flowers.**—It must be acknowledged that tree-planting has this superiority over the making of flower gardens, that the former is designed chiefly for the benefit of a succeeding generation, while the latter is for our immediate personal gratification.

**Euonymus.**—How to Propagate.—From Fulson, Rockingham Co., N. H. The *Euonymus atropurpureus*, called the Burning Bush, and at the West the Wahoo, is one of the finest of our native shrubs, being very brilliant in autumn, when covered with its scarlet fruit. It is raised both from seeds (to be had of seedsmen), and by cuttings or layers. Plants of this as well as of the European varieties can be had of nurserymen at 25 to 50 cents each.

**To Enjoy Your Garden.**—Keep within your means: both in respect to the size of it, and the labor, time and cost of keeping it in good order. There is a great deal of enjoyment in snugness.

**A Fragrant Fancy.**—A highfalutin correspondent of a certain paper, writing from his garden-bower, says: "The *Chionanthus fragrans* has been, for the last six weeks, covered with expanded blossoms in our shrubby border. It blooms best as a standard bush. The fragrance not only perfumes the garden, but all the neighborhood; and in the direction of the wind, (a gentleman informed me,) it may be smelt half a mile off! At certain seasons, when this and a few other plants are in flower, a stranger may literally smell his way to my garden!" Whew!

**To Make a Garden Roller.**—"Mary," Vergennes, Vt. A pretty good home-made roller can be constructed as follows: Take a straight log from the forest, say 2 feet through, and 1½ to 2 feet long, the ends sawed off square; remove the bark, and fasten into a frame by means of iron pins in the center of each end.

This will answer for the lawn or gravel walk. They are sometimes made by nailing narrow planks upon circular end pieces, the edges rounded off to make a smooth circular surface, and a box of stones or other weight fitted on top. If of pine or other light wood, the roller can be made larger in diameter, so as to roll more easily without being too heavy for hand use.

**Double Crocus.**—In reply to the queries of "Horticola," and our own comments in the November No., T. J. James, M. D., of Rochester, sends to Horticola, through us, a neat box containing flowers of the double Autumnal crocus. We understood Horticola as referring especially to the Spring crocus, but the Autumnal is very beautiful and rare.

**Case-Knife and Lima Beans.**—Wm. R. Davey, Mass., asks whether the Case-Knife Beans can be improved by planting the large Lima among them. Most of the ordinary Beans are varieties of the same species, and will cross and mix freely, while the Lima is a distinct species, and will not do so. As the large Lima does not succeed in his locality, we recommend him to try the small Lima; by starting them in a frame upon pieces of sod, and not planting out until settled warm weather, they have succeeded in a much colder locality than Massachusetts.

**Chili Potatoes.**—Large Yield.—Geo. Nichols, of Madison Co., N. Y., writes that he obtained from 4 "Chili Potatoes" a yield of 42 lbs., probably refers to the "Garnet Chili." They were cut into pieces with two eyes each, and planted without any unusual preparation of the soil. We have had two years' experience with this very productive variety, but found it always hollow in the centre. Have others found similar trouble?

**Big Bassano Beet.**—Isaac Beemer, of Litchfield, N. J., reports fine success with this variety of Beet from seeds received from the office of the *Agriculturist*. One of his specimens measured 26 inches in circumference, and asks if any one can beat that Beet. He recommends planting in a seed-bed, and transplanting, and thinks it is not generally known that Beets may be as readily transplanted as cabbage.

**Topping or Facing.**—"C. C.," of Jamesburg, N. J., says we must not spare the "little sins," as some are inclined to call the deception used in "topping" or "facing" apples, potatoes, etc. He regrets that the practice has become so common, that words are even coined to express it, and thinks that the corruption in government even may be traced back to such beginnings. We recently saw a striking instance. A very poor lame man had managed to get together money enough to buy a basket of apples to peddle. He took the basket from a barge at the wharf, brought it upon his back with much exertion for him, and sat down near our door to commence business. The first two layers were fine fair apples, but all below them were hard, gnarly specimens that a pig would squeal over. Instead of making a profit, the poor man lost half of all the money he had in the world. That was at least one degree below stealing.

**Parasites.**—Those plants which live upon the juices of other plants, are of two kinds: Those which take the crude or ascending sap, and those which live upon the elaborated or descending sap. The former receive the crude sap and elaborate it in their own green leaves, and can, like the Mistletoe, live upon widely different plants, while the others, living on material already prepared for them, are without green foliage, and, like the Beech Drops, are always found on the same or closely related species.

**Sweet Potatoes for Coffee.**—E. Stillwell, of Monmouth Co., N. J., sends us a sample of Sweet Potatoes prepared for Coffee according to the following directions: "Wash the potatoes clean, cut into thin slices, dry in the sun or an oven, and then roast the same as coffee. For 12 persons, take ¼ cup of ground coffee, and ½ cup of roasted potatoes not ground but left in slices, and add water in the usual manner." We tried the sample as directed, and find it of fair quality, but having a little more coffee taste than the mixture of rye and coffee more common in the market. The potatoes may have been roasted a little too much in this instance. Potatoes too small for ordinary cooking can be used thus.

**Extract of Flesh, or Solidified Beef Tea.**—This article is recommended not only for use in hospitals, but as a concentrated and readily portable food for soldiers. It is prepared by chopping beef, free from fat and bones, as if for sausage meat, and mixing it with its own weight of cold water. It is then slowly heated to

boiling, and allowed to boil one or two minutes. The liquid portion obtained by squeezing in a cotton cloth, is then evaporated to dryness. The evaporation should be done carefully, by placing the vessel in another larger one containing hot water. Half an ounce of this extract represents a pound of fresh beef, and when dissolved in a pint of water, makes a strong and nourishing soup. People at the West, where beef is so cheap, can readily prepare a valuable nutriment for their friends in the army.

#### Designating Nails—Why "Penny?"

—“L. F. P.” inquires of the *Agriculturist*, why common nails are designated sixpenny, eightpenny, etc.—The word penny appears to be a corruption of the word pound. Nails were counted by the six score (120), and by the great score or 1200. Sixpenny nails were those of a size to weigh six pounds to the 1200; tenpenny nails those weighing ten pounds to the 1200; and so of other sizes.

#### Book on Skeletonizing Plants.

—This beautiful art has been several times referred to in the *American Agriculturist*, and some illustrations have been given with a brief description. It consists mainly in preparing leaves and capsules of plants so as to retain the delicate veins and fibrous tissue perfect, but bleached white. Many of the specimens equal in beauty the most exquisite tracery in marble. The essential part of the process is, to place the leaves, etc., in warm water, and then let them lie in the same place for several weeks until the skin and cellular tissue decay so that they can be removed with a soft brush. The skeleton is then bleached in a weak solution of chloride of lime or other bleaching preparation. The art may well be practiced by every lady at very little outlay of time or expense; the specimens obtained are far more beautiful than the most elaborate ornaments that can be worked with the needle.—We have received from the Publishers (Messrs. Lippincott & Co., Phila.) a little volume of 50 pages from the pen of Dr. Parish, called the “*Phantom Bouquet*,” describing the process particularly and giving some exquisite engravings of prepared leaves. The paper, press work, and illustrations are admirable. It may be had at this Office. Price \$1, (which includes postage when sent by mail).

#### Agricultural College of Penn.—A

pamphlet of 63 octavo pages giving a succinct history of Agricultural Colleges generally, and of this one in particular, has been sent us by Dr. Fugh, the President of the College. It opens with the origin of agricultural education in Europe, by briefly tracing its history to the present time; it notices the several attempts to found agricultural colleges in this country, but is mainly devoted to the history of the Agricultural College of Pennsylvania. —This Institution has been full during the session just closed—110 students having been in attendance. The large and commodious buildings of the college about being completed, at an expense of over \$100,000, will be ready for students next year. The next session opens on February 22. Persons wishing further particulars can address Dr. E. Fugh, Agr. College P. O., Center Co., Pa.

**The Basket Overflowing.**—Our correspondents will please have patience. The paper is full, and we still have a large number of good basket items, as well as other articles which must wait for room.

#### Our Seed Distribution for 1863.

On page 4 is a list of seeds offered to our readers this year together with the method of distribution. The design of the annual distribution is simply this: With our special facilities for raising and purchasing good seeds, and by a wholesale system of operations, we are able to put up and send out, at an expense comparatively small for each subscriber, though large in the aggregate, a few parcels of choice seeds, either new or specially valuable, which may serve as germs to future abundance in each locality where they are grown. Most of the seeds are annuals, and will therefore multiply rapidly. A single plant of some varieties will yield seed enough for two or three plots another year, and by the next year the single original seed may supply a dozen or more neighbors.—Our aim is not to furnish a seed store for those accessible to good seeds and able to buy them, but rather by the free presentation of a few seeds where they would not, or could not be purchased, to awaken a taste for experiments, and for the cultivation of beautiful and useful plants. We introduce seeds of many common kinds, mainly for the benefit of those living remote from any access to good seeds, to whom they will prove acceptable. Most persons, however, will find in the list some seeds they have not yet met with or at least have not tried.

**Explanations.**—We regret to make the list of seeds

smaller than it has been in past years, or is likely to be in the future, and also to limit the parcels to only three or four. Nor can we introduce a large number of new seeds intended for this year, for the following reasons: First, the enormous rise in the cost of printing paper, (see page 32) leaves us no margin of profit for seed expenses. 2d. Several plots of seeds we were raising specially for distribution turned out badly. For example, we sowed four acres of an imported heavy oat, intending to make a specially large distribution of the seed. They were promising finely, but just before filling out, a furious wind and rain storm prostrated and literally destroyed the whole crop. 3d. While in Europe, we arranged with several parties to order from them, if desired, an unusually large supply of extra fine seeds of many new kinds. But the duty of 20 per cent added to imported seeds, with the thirty odd per cent premium upon the money in which the duty must be paid, the advance of foreign exchange to 145 and 150, and other increased expenses of importation will double the first cost which is very high for such choice seeds. We should have endured even this, however, had not the greatly increased cost of our paper rendered it impracticable, without raising the subscription price, a thing we do not wish to do.

With these explanations, we present the list, hoping that it will be more than acceptable to our readers. The supply of several kinds is limited, but we will do the best we can under the circumstances, begging the indulgence of our readers if we are unable to do all they would desire.

#### What our Agricultural Bureau ought to Do.

When the new Agricultural Bureau was provided for by Act of Congress, we had some hopes that good would come out of it. That the General Government should do something—should do much—to foster and develop the greatest interest of our country, its agriculture, is too evident to require argument. That no change for the worse could be made upon the system pursued during several years past, seems almost equally evident. The appointment of a head to the new department being a matter of so much importance, we tried to indicate to the President that in the selection of the Commissioner he should not be guided by his kind hearted feelings, by family considerations, or by importunity, but appoint the best man, the one of the most comprehensive views, of activity, experience, administrative talent, and enterprise. How far he was guided by such considerations we do not pretend to say. The appointment being made, we determined to judge of it by the result produced. So far we have waited and are still waiting to see what will be done. Any real good accomplished we stand ready to approve. Whatever hints we may offer to the gentlemen in charge of the Bureau, are therefore given in the kindest spirit. The Department belongs to us, in common with every other person interested in the agriculture of the country.

What ought it to do? First, we say, that it should aim at investigation, at the collection of information and statistics which can not be attempted by individuals. To illustrate: The distribution of seeds, excepting those of rare and costly character, can be done by individuals. Our Agricultural Department at Washington, has been mainly a free government seed store, largely devoted to collecting, at public expense, a great number of seeds, mostly common, and of good, bad, and indifferent quality. These, together with an annual volume of little value, have been distributed at random by members of Congress as political instrumentalities. It is well for the Government Bureau to collect rare and new seeds from other countries, and test their utility in different parts of our own country. But this should be only incidental.

Here are a few of the things we would pro-

pose for the attention of the Agricultural Bureau:

I.—The opening of a comprehensive and systematic correspondence with leading, reliable, and intelligent cultivators, at least one in each county in the United States, after the plan of M'Killop's commercial agency in this city. At that agency one can learn, on the instant, the exact status, the financial condition of any business man in the entire country. Such a system of government correspondence would enable the Agricultural Bureau to gather prompt information on any topic of general interest.

II.—The collection of accurate early information from the whole country in regard to the amount, condition and prospects of the growing crops. This information to be gathered frequently during the growing season, say from May to September, and the general result to be published for the guidance of both farmers and commercial men, and to be given to the public at once—not a year afterwards when of no particular value. The special announcement by telegraph, that “full returns to the Agricultural Bureau indicate a given amount of wheat or corn growing, and that the prospects at a given date indicated an average or a deficient or a surplus yield,” would be hailed by all classes as something tangible and useful.

III.—A thorough discussion, founded on comprehensive and general information, of two or three leading crops, each year. To illustrate: Grass, or the forage crop, is the most important one of the country. Could not the Bureau of Agriculture, with its facilities, set on foot and carry out an investigation which would tell us definitely: what are the peculiar characteristics of the Blue Grass regions of Kentucky, and into what other portions of the country that grass might be introduced with advantage; what kind of grass proves to be the best for prairie soils in the different localities, and why; and the same of clay soils, loams, bottom lands, etc., in the various climates, and at different elevations; the relative value of timothy, clover, lucerne, red-top, etc., for growing cattle, working animals, dairy purposes, also for horses, sheep, etc. The information should not be an Essay for the Report, at so many dollars per column, by one man, founded on his own limited observation, but it should embrace the results of a collection of reliable information from the whole country. Let the whole force of the Department be concentrated upon one, two, or three crops a year, according to its facilities for doing it thoroughly.

IV.—The introduction and testing of new seeds and plants. The present system is wholly wrong. It is worse than useless to collect a great mass of seeds, and scatter them broadcast over the land, at the caprice of Congressmen who use them at random as electioneering or political appliances. Let the Department secure a moderate supply of several new seeds and put a portion into the hands of a few persons of known skill and enterprise, in a sufficient number of localities to make the experiment general for the whole country, and let careful returns of the results be obtained and published. A hundred parcels of seed thus tested, would furnish more information than a million parcels scattered promiscuously. One or two hundred specimens of a new plant thoroughly tried in as many localities, would be amply sufficient to test its value, and the results obtained from their careful trial in judicious hands, and under specific instructions, would be decisive.

The above are a few suggestions we would offer to the managers of the new Bureau of Agriculture. We may add others hereafter.





### END OF THE LAWSUIT-DIVISION OF THE PROPERTY.

(Designed and Engraved for the American Agriculturist.)

The above sketch by our German artist, A. Hochstein, is designed as a sequel to the picture of last month, in which two litigants were tugging with all their might, the one at the horns and the other at the tail of a cow, while a lawyer was quietly seated upon a pile of books, drawing his fees (milk.) We have here the final result of the suit. The cow is wasted, her flesh has gone into the milk pail—and the milk has been required to sustain judges, lawyers, sheriffs, jurors, witnesses, etc. The contestants are unusually lucky if they have not wasted the value of half a dozen other cows, to say nothing of loss of time and strength. The original cause of the lawsuit was, or might have been, (for we have known of just such a case,) a difference of recollection as to whether the cow was sold to "come in" about the first of May, or after that date, the purchaser refusing to pay without a reduction of \$3 for loss of milk during eight weeks. The illustration is not aimed at the legal profession *per se*, for we are free to say that it is an honorable one, when honored by its members. Below we give place to one of several protests from the profession, which spiritedly, and in the main justly, sets forth its value, importance, and dignity, and we need add nothing more on that point. The writer admits the prevalence of just what our illustrations are intended to discourage, viz.: a propensity to run into litigation about every real or fancied difference of opinion concerning property rights. We recommend our legal friends who protest so strongly against our last month's engraving, to read the article appearing with the original illustration in the September *Agriculturist*, 1859, (vol. 18, p. 265.) We repeat a few paragraphs:

"The picture portrays the character of very many of the lawsuits carried on in our country. So long as the cow gives milk, it will be required for 'expenses,' and when this fails, the worthless carcass of the animal may perhaps be obtained by the litigant who has the most money, or the greatest physical endurance—each of them having in the mean time sacrificed the entire use

of the cow, and, besides, time and strength enough to have acquired half a dozen better animals.

"With most men, the first impulse, on having a slight difference with a neighbor, is, to 'go to law about it.' To submit the case quietly to the arbitration of disinterested persons, and yield to their decision, would not quite satisfy the dignity, nay, the belligerent propensity of the parties. How few men, comparatively, there are, who have lived forty years without having 'been in court' one or more times. And how few are the instances where even the victorious party has not lost more than has been gained—in time, worry of mind, expenses—to say nothing of the trouble entailed upon others who have been drawn into the conflict as witnesses, interested spectators, jurymen, etc. We have a vivid recollection of being called from pressing business to go fifteen miles to attend 'county court,' and of waiting four whole days to give evidence as a witness, in a case of which we personally knew nothing; and to cap the climax, the case was 'adjourned over' three months, when two days more were consumed in waiting. Our protestations that we knew nothing of importance, and that all we did know was hearsay, amounted to nothing with those in eager fray. The idea seemed to be that that side would be the strongest which could bring the most persons on the stand as witnesses, and so with more than twenty others we danced attendance. The whole amount at issue was less than our individual loss of time in one of the days spent at court. We received in return one shilling (12½ cents!) 'in advance.'

"There is no doubt that most persons who would first sit down and count the cost of a suit at law, would be deterred from litigation, but for a feeling of false dignity. 'I would expend the last cent before I would allow him to trample on my rights,' is the common expression.

"But the pecuniary loss, serious as it often may be, is not the worst feature in the business. The hatred engendered, and bad passions nourished, re-act sadly upon the parties engaged. Said one who had finally obtained his suit,

involving a large amount, and one which he could ill afford to lose: 'Had I foreseen the anxiety and vexation I have suffered from this business, I would have given a receipt in full for the amount, rather than have commenced.' Many others will bear the same testimony. There are cases where it is positive duty to invoke the aid of law to secure or preserve rights, but reason, not passion, should preside when such interests are involved.—If any of our readers are tempted to indulge in 'law,' let them first give this picture a careful study, and then inquire if it will not be better to lose the milk at once, than to hold the cow with might and main, for an indefinite period, and in the end find all the labor lost."

We are happy to say that we have but slight obligations, good or bad, to cancel with our legal friends. We have got along more than forty years without being actually called into court as a defendant or plaintiff, and hope to be equally fortunate the rest of our days. A libel suit, claiming \$10,000 damages against us, for an article cautioning our readers against land speculators, was commenced some three years since, but the parties failed to intimidate us into silence, though the complaint is still on file in some court. Our good legal friend, Wm. E. Robinson, Esq., put in a rejoinder which (thanks to his legal skill, and in this case legal brevity,) seems to have set the matter at rest.

But we will now give room to our able and worthy friend to put in his rejoinder to our pictures. Adhering to our rule not to contest 'a case' if to be avoided, we make no response, but submit the whole matter to the jury of readers.

#### LAW, LAWYERS, AND LAWSUITS.

To the Editor of the American Agriculturist:

I have taken and read your paper for half a dozen years or more, and prize it highly. It has done much to change my homestead from a small city lot to a twenty acre farm in the suburbs of New-Haven. You have contributed not a little to my stock of horticultural, agricultural and pomological knowledge. Warmed by your enthusiasm I

have had, at different times and with various degrees of intensity, the pear fever, the berry fever, the poultry fever, and the hog fever—to say nothing of other distempers. From some of them I have not yet entirely recovered. I have reproached myself at times for not giving you something of my experience, for he who always receives and never reciprocates, is liable to be suspected of selfishness. But pressure of other duties has thus far prevented.

I belong to the best abused and the least defended profession in the world—the legal—having been a member of it for upwards of sixteen years, during which time I have had my full share of business, and all the professional success to which I was entitled. I mention it not egotistically, but only to enable you to see that I ought not to be ignorant of the subject about which I purpose to write.

A well digested system of just and equitable laws, and courts of justice to properly enforce and administer them, are absolutely indispensable for the security of life, liberty, and property. No civilized community can exist without them. Destroy them in this country to-day, and we will relapse into barbarism with a fatal rapidly unequalled by our wonderful progress thus far in all that constitutes national greatness. The confidence and security with which we lie down and sleep at night, in both city and country, is owing to the fact that the protecting shield of law is above and around us, and that we have courts to redress our wrongs. I will not enlarge upon this—its truth will be admitted by every one who will pause to think and reflect.—This being the case then, every one engaged in the work of ridiculing the tribunals, and their officers, which are constituted for the purpose of administering justice between man and man, is prosecuting a very bad business. His blows are aimed at the pillars of the State. He stabs at the nation's life.

In your December No. you illustrate your idea of lawsuits by a picture which is a fair caricature of some lawsuits, and of some lawyers and their clients. [Exactly what we designed it to be.—Ed.] It may in some cases do good—in many its tendency will be bad, if it prevents your readers from obtaining that justice to which they are entitled, and which they can not have, except through the agency of the courts. There is much litigation that might and should be avoided. It is equally true that there is much that should be encouraged. Sweeping, indiscriminate censure of lawsuits and lawyers is an easy matter. Anyone can do it. It is much easier than just and fair discriminations. Such reformers need to be themselves reformed. They trim dead and diseased branches by cutting down the tree at the root. Your picture is of this character. No line or word gives to your many readers the fact that your illustration is a truth only as it describes exceptional cases, and that it is a monstrous falsehood so far as it conveys the idea that our courts and lawyers are engaged not in the god-like employment of administering justice between man and man, but in extorting money unjustly from credulous clients.

The picture you say has already caused some clients to settle their cases by compromises. If so, it by no means follows that they were wisely settled. Yet you conclude such was the case without knowing apparently the facts.\* An insurance company refused to pay a widow \$2000 upon a policy which she held upon her late husband's life. I helped to recover for her a verdict of over \$2400 for debt, interest, and costs. She had two lawyers, and the case was taken to the court of errors by the company, and there abandoned, leaving the verdict of the jury in force. After my associate and myself had received all the "milk" we wanted, I had the pleasure of paying to the happy widow over \$2000. Now, while the case was pending, had she seen your

[\*Here is one of the cases. Two neighbors in this State had commenced a suit about a cow which promised to be a long one. They happened at the Post Office in a country store, as the *Agriculturist* arrived, to which they were both subscribers. Each opened his paper and saw the engraving. They laughed over it, approached each other in good humor, and settled their difficulty on the spot by mutual concession and agreement. They sent us a report, and we shall not tell how large a fee was presented to us in acknowledgment of legal services rendered.—Ed.]

illustration of the beauties of litigation, and compromised her claim for \$1000 by reason of it, you would have had another opportunity of congratulating your readers upon the happy influence your picture was exerting in diminishing and settling suits. But your picture would have cost the poor widow \$1000 in clean cash! I would recommend this case to your "artist." I could fill many numbers of your paper with other instances that have come under my observation, illustrating the same great truth, but it is unnecessary.

To rush into litigation to redress every little real or imagined wrong would be foolish, and there is in my judgment no class of men in the community who do so much to discourage it as the lawyers. I have had abundant opportunities of knowing this is true of the attorneys of this State as a body, and I believe it true of every other State. The most unselfish advice to settle and to quietly submit to little wrongs, is given constantly by the men who are so liberally maligned. [Such men we admire and honor—if there were not many exceptions, there would have been no occasion for our picture.—Ed.] A bad man loses his case and he abuses the lawyers. A rogue is convicted of crime, and he curses the courts. A man wishes to be a villain and is afraid of justice—he thinks society would be improved if the law books were all consumed. A witness, bribed or biased, has his falsehoods exposed on the cross-examination, and he hides or tries to hide his dishonor by a prodigal abuse of the legal fraternity. A political editor having large self-esteem, a longing for office, and a narrow-minded jealousy, delights to ridicule and stab the legal profession, some of whose members he imagines are a little in his way. And sometimes a clergyman, who has failed as a lawyer, prefers to place his change of employment upon the ground that he is too good a man for so bad a business. And now and then the editor of an agricultural paper pauses in his enthusiastic admiration of fat pork and poultry, large cows, cabbages and colts, to circulate libels upon one of the most laborious and useful professions. [Is the holding up to ridicule the practices of those foolish men whom good lawyers themselves try to keep out of the law, any "libel" upon the profession?—Ed.]

In the meantime the lawyers as a body smile at the narrow-minded folly of their assailants, and answer by a dignified silence. I stand almost, if not entirely, alone in attempting a reply. I do it in part to pay a debt, for I feel that I owe you an article or two. Another time I will select a subject more appropriate to your columns. FAIR PLAY.

New-Haven, Conn., Dec. 1, 1862.

### Treatment of Wounds in Animals.

A correspondent inquires for directions as to the best treatment of flesh wounds in animals, what salve or liniment should be used, etc. It is a mistaken notion that any plaster, salve, liniment, or other nostrum, will heal a wound. The divided parts must grow together by the action of vital power in the flesh itself. The most we can do in the matter is, to place the separated portions under the most favorable position for uniting, and then let nature work. Of course the flow of blood must first be stopped. Unless some large blood vessel has been wounded, bleeding will usually soon cease. If however it continues long, and especially if the blood be of a bright red color, and comes out by jets or spirts, showing that an artery is divided, prompt measures are necessary, usually requiring some surgical skill. It is sometimes needful to hold open the edges of the wound, find the ends of the blood vessel, and tie them with strong white silk, leaving the silk long enough to hang out of the wound. In less severe cases, the application of cold water, or of alum water, or pressure, will aid in stopping hemorrhage. In a simple cut, it is not necessary to cleanse

the wound from blood. Its coagulation will aid in the healing process, if the parts can be brought together and kept in contact. Foreign substances, as dirt, splinters, etc., must be removed before a cure can be looked for.

When bleeding has mostly ceased, bring the parts in close contact, and secure them by narrow strips of adhesive plaster. This article, which can be procured at any druggist's, should always be at hand. If, however, the laceration be extensive, it will be necessary to sew the parts together. Some means should be adopted to prevent displacement of the parts, after healing commences. To relieve the itching and irritation, the animal will endeavor to scratch or rub the wound, and thus often make it worse than at first. Bandages are useful, where they can be applied. They should not be too thick, for fear of heating and consequent inflammation. The animal should be kept entirely quiet, and the diet be made rather low. If much inflammation appears in spite of these precautions, an occasional moderate dose of Glauber's salts, together with the application of cold water to the wound, will check it. These general directions will answer for wounds not severe enough to require a veterinary surgeon.

### Imprisoned Animals.

Animals need shelter, but imprisonment is neither necessary nor beneficial. The horse and cattle stalls in too many instances supply only one requisite, viz.: warmth. Animals are frequently penned up from week to week, in narrow quarters, reeking with filth which fills the air with noxious effluvia, where little or no light can enter, as though they were undergoing punishment. Now even the best accommodations that can be provided, are in a measure unnatural. Our domestic animals at the North are natives of warmer climates, where they are accustomed to roam at will during the entire year. Every important change from this, their natural condition, will more or less interfere with their best development. If abundant and wholesome food, pure air, and plenty of light be supplied, the benefits of shelter will more than counterbalance the loss of freedom.

Confinement of animals should not be too strict. Some amount of exercise is indispensable. The horse that is kept standing on the stable floor for weeks, will be troubled with swollen limbs, loss of appetite; will be likely to acquire the habit of cribbing; and when finally used, will over-exert himself, and then quite likely be laid up for a time with stiffened muscles. Cattle become restless and feverish from long confinement, and will not lay on fat, or give a full flow of milk, without a moderate amount of exercise daily. A good plan is to turn them loose in a sheltered yard after the first feeding, while the stables are being cleaned. Animals as well as men enjoy a change of place, and with these their health and comfort are intimately connected.

### Cure for Foot Rot in Sheep.

A. A. Goff, Farmington, Ohio, contributes to the *American Agriculturist* the following preparation for curing foot rot in sheep, which he says has been very effective in his neighborhood: "Mix 3 oz. each of blue vitriol (or sulphate of copper), white vitriol (or sulphate of zinc), verdigris (or acetate of copper), and gunpowder, with ½ pint each of alcohol, spirits turpentine, and strong



vinegar. Cork up tightly a few days before using. It is easily applied from a vial having a quill inserted through the cork. By dropping this mixture into the affected parts three times, once in ten days, a cure will be effected."

One of the ingredients of the above mixture, viz.: sulphate of copper, in strong solution, has long been used by successful sheep owners, as a specific for the cure of foot rot. Randall, in his work on Sheep, details numerous cases cured by himself with this treatment. Whether the addition of the other articles is beneficial, we are in doubt, and should recommend to try it only after the sulphate of copper had failed.

In applying either remedy it is essential to pare away the hoof from the affected parts to get at the diseased tissues, and thoroughly saturate them with the liquid. The solution of blue vitriol should be used as hot as can be borne by the hand. Extended directions for the treatment of this disease were published in the *Agriculturist*, Vol. 20, page 141 (May 1861).

For the American Agriculturist.

### Raising and Training Colts.

The earlier in life the education of any animal commences, the easier will be its training and the more certainly will its habits be fixed. Horses learn most of their vices before they are three years old, and in a large number of instances the work of "breaking" them does not commence before the second or third year.

Begin when the colt is one month old. Put on him a leather or web halter, without the hitching strap. Let it remain there and you will have control over him when you wish to handle him. Have a leather hitching strap with a buckle or clasp on one end, to fasten into the halter ring when you wish to lead or tie the colt. Never tie a rope or a rope halter around the neck. Allow the colt to nibble at his dam's feed while she is eating. After he has become accustomed to the halter and to being led about and handled, you can tie him alongside of his dam at feeding time, watching him the first time to prevent his pulling back, and afterward if he shows a disposition to pull. Never speak harshly to, or abuse either dam or colt. You can do more by kind, firm treatment than by abuse of any kind.

Wean the colt at his seventh month, keeping him out of sight and hearing of his dam for several weeks. Give him a pint of good oats with plenty of sweet hay morning and evening, also fresh pure water. As he grows larger, increase his feed, always giving the best. Remember the colt is now forming the bones and muscles upon which his future usefulness depends, and he can not form strong, solid ones without good strong feed and good shelter. Give a feed of chopped stuff and cut straw several times during the week, to keep his system cool, and to prevent the "lampas." If he should take them, put him on soft feed, occasionally giving him a bran mash, until the lampas disappear. Keep the colt under shelter during the Winter nights, and on stormy days and nights at any season of the year. A loose box or stable in which he can be placed without tying, is best; next, a stall six feet wide in a stable well lighted, drained and ventilated. Have a ring and staple driven into the manger bar, to tie to. The best plan for tying, is to pass the halter strap through the ring and tie it to a small weight, heavy enough to keep the strap always drawn tight. Have the strap long enough for the colt to lie down with his head flat on the floor; the weight will always keep the strap stretched so that he can not get

his feet over it. Keep the stall well littered at night and perfectly clean during the day. Do not put the litter under the manger when cleaning out the stall in the morning, but throw it under a shed outside of the stable, to dry before using at night. The ammonia arising from the urine decomposing in the litter is very injurious to both eyes and lungs. Frequently sprinkle some good deodorizer on the floor to absorb and destroy all noxious gases. Accustom your colt to harness, and to saddle and bridle, by putting them on frequently, and letting them remain on for a half hour. Train the colt without blinders on the bridle. Never draw the check rein tight. For fast driving, it is better to dispense with it entirely. I would not advise an inexperienced person to use the biting bridle, but if used, let the reins be loose. If possible, it is best to let the colt run until three and a half years old, and if very valuable, until five years of age before putting to regular service. You can teach the colt the use of the lines before he is fit for service, by putting on a surcingle with rings fastened to it, two thirds down each side of the colt. Put the reins through the rings and buckle to the bridle. Walk behind the colt and teach him the use of the lines. The rings on the surcingle will prevent the reins from slipping up over his back if he should try to turn; by holding your hands low, it is impossible for him to turn. If he backs, touch him lightly with a stiff whip. By the above training the colt at three years of age will be ready to put to light work, though I would advise waiting a few months longer. The subsequent training will depend on what use the horse is intended for.

Alleghany Co., Pa.

R. S. W.

### Colvin's American Milking Machine.

Our recent files of English papers have much to say of this apparatus. The *Agricultural Gazette* sent out a special reporter to witness recent trials in the dairying districts of England, and a single number of that journal has some ten columns upon the performance of the machine. The inventor appears to have met much better pecuniary success abroad than at home.

Two or three years since, the machine was brought to our office with a request for a favorable notice in the *Agriculturist*. It did not seem to us to meet the high claims made by the inventor, and before deciding as to its merits, we asked permission to try it upon our own place. This was not acceded to, and the exhibitor left, remarking that it was all right, and that it would be sure to go with the people whether we endorsed it or not.

At the recent International Exhibition in London, one of the proprietors was on hand with the apparatus, where its novelty immediately attracted great attention, and we were informed that large sales were made. We tried to witness it in operation, but were unable to be present at the exhibition at the right hour. After a very careful examination of the apparatus itself, our previous impressions of its value were not changed. The machine is arranged with India-rubber sockets to receive the cow's teats, and the milk is drawn out by an ingeniously constructed pump attached to the pail. If such an apparatus can do the work well, it is a most desirable invention, but we feel strong doubts as to its practical success. The operation of hand-milking most nearly resembles the sucking of the calf, and is therefore likely to be most effective. In the *Agricultural Gazette* reports, it is ad-

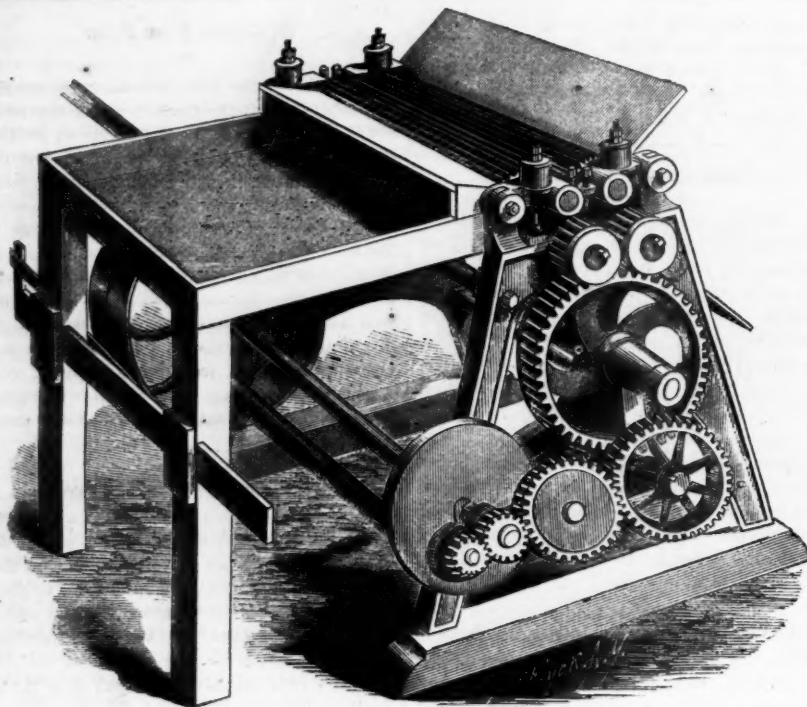
mitted that the cows were not all milked clean, that some of them proved refractory, and others held up their milk. These objections were met with the excuse that November is not the time to begin with the machine, after the cows have been hand-milked all Summer; that in Spring they will yield more readily. If this excuse be admitted, the sales will probably go on in England during the Winter, and an opportunity will be given for the American public to learn the final results. We are quite willing that English farmers shall be at the expense of the doubtful experiments, and that the manufacturers there shall make the first investments in the patent. We are quite ready to say a good word for the machine, if the patentees can show by fair practical experiments that cows can be milked clean with it, at saving of labor.

### Feeding Turkeys in Winter.

Where corn is cheap, and the bins are full, nothing better is needed. But unfortunately many who like roast turkey, have their bins nearly empty, where corn is nearly a dollar a bushel. These birds will eat longer of corn than of any other food. They seem never to get enough of it. But they are by no means dainty in their diet, and will eat any thing coming from the kitchen that a pig will devour, if it be properly prepared. They will work up the refuse material from the farm and garden, about as well as pigs.—Boiled potatoes, fed warm, are highly relished by them. In this way potatoes, that are too small for marketing and for seed, may be turned into roast turkey on very short notice. If the parings and slops from the kitchen are boiled and mashed with them, it is all the better. But they need a variety of food, green as well as cooked, in order to thrive most rapidly. They are very fond of cabbage, and will feed upon the refuse plants that have not headed, until the stumps are picked bare. If these are not on hand, raw turnips chopped up fine will be readily eaten. They need also some animal food to promote growth in Winter. Beef scraps from the tallow chandlers or butchers are as highly relished as by hens. Nothing in the way of animal food comes amiss. It is of more importance that the food should be abundant and various, than that it should be select.

In fattening, some shut them up in a room partially darkened, and feed with scalded meal and pounded charcoal; but we object to the confinement of the turkeys. It is almost impossible to keep the food clean and to prevent waste, and they are quite as restless as when they have their liberty. With regular full feeding at night and morning, they will not wander far from the yard, and will take no more exercise than will be for their health, and the best flavor of the flesh. By this process of feeding, a late brood of turkeys may be brought up and fattened in Winter, without any serious encroachment upon the corn bin. With turkey at fourteen cents a pound, it is a very convenient article of barter, at the village store, and not hard to dispose of in the home market. The relief from salt junk by the winter feeding of turkeys is immense.

QUESTIONS FOR QUACK DOCTORS.—Will eating roast duck give a man a foul stomach? And, if so, will the flesh of neat cattle be a good cleansing agent? Does eating green corn produce huskiness of voice? What kind of hoes should be used for corns, particularly where there are several *achers* under cultivation?



MALLORY &amp; SANFORD'S IMPROVED FLAX BRAKE.

### Prospects for Flax Culture—An Improved Brake.

The long and prosperous reign of cotton as king of textile materials, has in good measure thrown into obscurity the plant that from earliest history gave royal robes of fine linen to monarchs and comfortable apparel to their subjects. In the memory of many now living, no farmer's stock of implements was complete without the flax brake and the hackle at the barn, and the foot spinning-wheel by the fire-side, with which, and the loom, were wrought from the annual crop, clothing for the present use, and for the daughters' dowry. It is consoling to know that if the accustomed supply of cotton be cut off by the desolating storm of war, we have yet resources which have in former times proved adequate to furnish the necessities, if not all the luxuries, of late years supplied by the southern staple. Numerous costly experiments have been long in progress to discover, if possible, some mode of treating flax to render it capable of taking the place of cotton, and though the end is not yet fully reached, advancement has been made, and ultimate success is not hopeless. A large establishment in New-England formerly used for the manufacture of cotton goods, we believe, has recently been purchased by a company for the purpose of working flax on cotton machinery, under new patents, for the production of what is called flax-cotton.

But even if flax can not be manipulated so as to come into competition with cotton, and supposing the supply of the latter to be fully restored, there is yet a good prospect that flax-growing will prove remunerative. The supply of the staple for the manufacture of linens and other fabrics has been growing more and more scanty for some time past. A year or two since an agent was sent to this country from Great Britain to inquire concerning the amount produced here, and to take measures if possible to increase the breadth of land devoted to this crop. In addition to the call for flax for manufacturing purposes, the seed is in constant request,

and, by itself alone, is considered in many sections as good a paying crop as wheat or corn.

It is evident that to make flax-growing pay well, at least in ordinary times, it is necessary to employ improved machinery in preparing the fiber for market. Flax-dressing by hand is too slow to be profitable. Mills in various parts of the country are ready to perform this work, but they can serve for only a limited area; flax in the straw is too bulky to allow of distant transportation. On account of this difficulty the fiber has been wholly neglected in large districts where the plant is cultivated, and only the seed has been saved, for the manufacture of oil. We have recently examined a newly invented flax-brake intended to meet this want, which if successful will do much to stimulate flax culture. The machine is shown in the above engraving. It consists of a series of fluted iron rollers, seen at the top, between which the flax is drawn from the feeding board. A peculiar vibratory motion is given to the rollers by means of ingeniously arranged gearing seen near the base of the machine, which causes the flax-straw to pass repeatedly back and forth between the rollers, and it comes out with the "boon" or woody part so thoroughly broken that a very large part of it (64 per cent, it is claimed) can be readily shaken out of the fiber without any further dressing. Machines for a similar purpose are already in operation at flax mills, but they require trained workmen to tend them, greater power to work them, they leave a large part of the "shoove" or broken straw mixed with the fiber, and their operation is not without danger to the workmen. Numerous instances of the loss of an arm have occurred to inexperienced operators. The Mallory & Sanford brake can be run by an ordinary horse-power, and any laborer can use it without danger. Another advantage claimed for the new brake is a great saving of fiber. In experiments made in the flax mill at Union Village, Rensselaer Co., N. Y., 500 lbs. of flax straw dressed on a brake of the old pattern, yielded 92½ lbs. dressed flax, 43 lbs. coarse tow,

and 9 lbs. fine tow. A like quantity of the same quality under the new brake gave 110½ lbs. dressed flax, 16 coarse tow, and 3 lbs. fine tow—a gain in good fiber of over 3½ per cent. The greater weight of tow in the first lot above the 10 lbs. saved in the "line" or dressed flax, was owing to the larger quantity of "shoove" or broken straw remaining among it, rendering it of less value than the tow from the new brake. The capacity of the above machine is said to be from twenty to twenty five hundred lbs. of flax-straw per day of ten hours. If the above claims of the inventors are reliable, and they appear to be well substantiated, the machine will greatly aid in making flax culture more profitable. Further information concerning this apparatus can be obtained from Messrs. Mallory & Sanford, corner of Center and White streets, in this city, where the brake may be seen in operation.

We consider the subject of flax culture of such importance that we are preparing to give during this year the fullest possible information on all the practical points involved. We are already in communication with those who have had much experience in the business, and shall lay the result of our investigations before our readers in time for putting in the next crop. We will also esteem it a favor if those of our subscribers who are familiar with flax culture will contribute their knowledge on the subject for the general benefit, giving particulars as to best soil, proper preparation of ground, time and manner of sowing, quantity of seed per acre, after-culture and treatment; in short all the items that the inexperienced desire to know.

### Agricultural Inventions in 1861.

In the last number of the *American Agriculturist* page 326, we gave a synopsis from the latest official list of some of the patents issued in the year 1861. The topic is worth referring to again, for there is perhaps no better indication of the progress making in agricultural science and practice. The progress already made is very great. It is probably safe to estimate that the inventions of 1861, as compared with the implements in common use only twenty years ago, will effect a saving of the labor of more men than are enrolled in our great armies, even if these men were all taken from the farm. The demand which calls forth these inventions, shows that farmers are not satisfied with the old methods, but are looking for something better. As long as people were content to mow an acre a day with the hand scythe, no machine was thought of, capable of doing the same work in a fifth part of the time, and with brute force instead of human muscles. The same may be said of the horse-rake, which puts the larger part of the afternoon work of the hay field upon the horse. So of all the other inventions that lighten the labors of the husbandman and increase his profits; they have their origin in the conscious imperfection of the old implements. The list of inventions furnishes a good mirror of the thoughts of the farming population, and shows whither the current is tending.

We find in the list for 1861, twenty-five inventions pertaining to bee-hives, showing that a new impulse has been given to this branch of rural economy. The interest in hoed crops is represented by fifty-three patents for cultivators. When it is recollected that in each one of these patents are represented a number of unsuccessful applicants, it will be seen that a great amount of study has been bestowed upon a field of in-



quiry already pretty thoroughly explored. With the steel tooth cultivators of former inventors, or with Share's horse-hoe, there was no difficulty in doing nine-tenths of the tillage of the corn crop in the most satisfactory manner. There are nine patents for seed drills, showing that there is dissatisfaction with the common mode of sowing grain broadcast. There are ninety-seven patents for harvesters, mowing machines, reapers, and their various appendages. The inventive skill of the country seems to be specially directed to the most economical method of gathering our hay and grain harvests. The problem is solved, for we have now machines that put all the exhausting labor of the hay and grain field upon the muscles of the horse, and greatly lessen the drudgery of the farm, almost turning it into agreeable pastime. The great West and the boundless prairies speak in these inventions.

One might think on inspecting any of four large agricultural warehouses, a (single one of which enumerates more than a hundred kinds,) that plows were nearly perfected. Our inventors are not of that mind, for we find in the list, sixty patents for plows and their appendages. Something must be the matter with the old methods of dropping seed, for we find thirty-seven new seed planters, most of them for corn. The days which shall see a boy dropping corn from a basket with a man covering with a hoe, are nearly numbered. The writer tried one of these horse corn planters last Spring. A man and boy easily planted ten acres a day with it, which is some improvement upon one acre a day. The corn came up as well and made as good a crop as if it had been planted by hand.

Beside these, there are a great variety of seedling machines, grain separators, thrashing machines, machines for sowing fertilizers, spading machines, straw-cutters, horse-rakes, feed cutters, corn shellers, and over twenty new churns, showing that the war has very little affected the inventive genius of our people, or impaired our capacity to feed ourselves and the world.

#### Evans' Rotary Digger.

The report given below indicates that this implement is at least an approach to what has long been desired, as an improvement upon the plow: "The undersigned committee, appointed to examine 'Evans' Rotary Digger,' exhibited by Mr. H. C. Hepburn, at the State Fair at Rochester, respectfully report, that the machine was submitted to them in operation on a field near the Fair grounds. The soil was a loam of medium texture between the sandy and clayey, and had been cropped the past season with beans. The machine was drawn by a pair of farm horses rather under the average strength, making at each passage over the field a cutting *twenty inches wide and eight or nine inches deep*. It moves on three wheels, and weighs in its present condition, as stated to the committee, 1,200 pounds. The operation of the revolving teeth or diggers, upon the soil, is similar to forking. One passage over such soil as that on which it was tested before the committee, appeared to loosen and pulverize it to the full depth of the teeth or diggers, but when twice passed over the same cutting, the weeds and grass had nearly all disappeared, and the soil was made so loose that persons walking over it sank as they would in a mass of newly fallen snow. The committee take pleasure in saying, that, on the whole, they have been well pleased with what they have seen of the practical working of 'Evans' Rotary Digger,' and concur in the opin-

ion that it is in a fair way of being made a machine of great value for the pulverization of the soil. All of which is respectfully submitted. LEWIS F. ALLEN, of Erie; SAMUEL L. FULLER, of Livingston; P. BARRY, of Monroe, *Committee*."

#### Inoculating Meadows.

In a foreign exchange, we find mention made of Wedlake's "turf-separating machine." This is nothing very new. It is a machine with which to lay down parks, meadows and lawns by inoculation. It resembles somewhat a common straw-cutter, and is used as follows: The land to be treated must be plowed, harrowed, cleared of all lumps, weeds and large stones, and then rolled smooth. Go now with a paring-plow to some common or roadside, where the turf is of good quality, and having sliced off a suitable quantity, stack it up in small, loose heaps, where it will become partially dry, and easily broken into fragments. This prepares it for the machine, into which it is put, and torn and separated into small fibres, or numberless distinct plants with roots. Before the plants become much withered, take them by the basket full and walk over the field, sowing them broadcast, like grain. (It should be said, however, that this sowing should be preceded by a light scarifying of the surface with a harrow.) After the sowing, follow with a roller, which will compress the roots a little into the earth and give them a hold on the ground. This process in a good grass season insures a fine turf in a single year.

#### Turning out to the Right, or Left?

Long custom is not easily changed, and reasons "as thick as blackberries" are always to be found, for "doing as our fathers did." This has been fully verified by the mass of communications called out by the article in the *American Agriculturist*, (Oct. No., Vol. 21, page 302,) showing the desirableness of teamsters adopting the English practice, and turning to the left, when meeting. An anonymous writer, "E. O." presents the opposite view quite forcibly. His reasons for opposing the changes are: the difficulty of obtaining common consent; the existing laws to the contrary; the necessity of altering the construction of all one-horse sleighs, the thills of which are now placed in accordance with the present manner of turning out. He is however in favor of the driver changing his seat to the left, that he may better keep his vehicle from collision. He gives an additional reason for this in the fact that the step upon carriages is on the left side, and if a lady is first handed in, the driver must crowd past her to his place on the right—not easily done in these crinoline times. He has practised driving seated on the left for years, and likes it much better.

Perhaps our correspondent can use the whip well with his left hand, otherwise both he and his lady would occasionally find it awkward business for him to give a strong right-handed blow, while seated on the left. The necessary change in sleighs would cost less in the end than the damage resulting from collisions—particularly in crowded cities, and as for laws and customs, they should be helped and not hindrances to improvement. If the propriety of a change of custom be generally agreed upon, it will not take long to make all needed legislation, and to re-model the one-horse sleighs when used. After hearing both sides pretty fully, we adhere to our position on the question, and all things considered, it is better to "Turn out to the left."

#### Branched Bean Poles.

"Y." of Saratogo Springs, N. Y., communicates his experience to the *American Agriculturist* as follows: I have been for a number of years, a successful cultivator of Lima beans, and now give you my *modus operandi*. My poles, which are dwarf maple, hickory, etc., say nine or ten feet in height, are cut, leaving their tops on. These poles (which I put under cover in the Winter,) usually remain sound five or six years. Early in the Spring, I have my bean patch well worked, then have holes dug, say two feet by eighteen inches, then dump into each hole, about  $\frac{1}{2}$  a bushel of fresh horse manure, cover with rich earth; then, with the aid of a crowbar, set the poles, and plant the seed in a circle around each—say half a dozen beans, with the eyes downward. These, after they get beyond the reach of grubs, I thin out, leaving three in a hill, and I have never failed in raising a good crop. True, I am compelled at times to cover them up nights, by placing newspapers around them, held down by stones or lumps of dirt, to protect them from frost, but I am well repaid for the trouble. I can raise from the same number of hills, with brush on the poles, more than double the quantity of beans that can be raised on the old-fashioned crowbar pole.

For the *American Agriculturist*.

#### Good Way to Make an Asparagus Bed.

With a two-horse plow turn a deep furrow each way, this will open a ditch two feet wide to the depth of the soil. Then run the plow in the bottom of the furrow and loosen the clay, or subsoil, as deep as possible, and throw this out with a shovel upon one side. Place in the ditch six inches of half rotten manure, cover it with a slight coat of the soil, then make a small mound of sand or fine earth (sand is best), every two feet, in the center of the ditch. Set the crown of the plant upon it, and cover with sand slightly; then shovel or plow the soil over the plants three inches deep, which will bring the surface level again. Next take the plow and one horse and run close to this row, throwing the soil from it, then turn the other way and throw the subsoil on the first planted row where it may remain. Clean out this second ditch with the shovel and proceed to plant the asparagus roots as before; and in the same manner extend the bed to any desired size.

The planting should be done in the Fall, and the clay that is thrown on the top will be pulverized by the frost and sufficiently enriched by a coat of four inches of manure, which should be spread over the bed as soon as the frost has decomposed the clay upon the bed. This I think the cheapest way of making a good bed, for it must be made deep to be durable. One-year-old plants are best. I have them now from seed obtained from the *American Agriculturist* last Spring, that have a circle of roots over a foot in length. By setting them upon a cone as described above, they are placed exactly in their natural position, with the ends inclined downward towards the manure and moisture; and the earth coming in closest contact with them. And, by the way, this is the proper plan for setting all kinds of plants, or trees, that have fibrous roots, between which the earth will not readily pass, the great object being to get the earth in closest contact with the roots. A good coat of manure and salt should be spread over the asparagus bed every Fall; and it will produce for an age.

Montgomery Co., Md.

W. R.

For the American Agriculturist.

### Shall we Teach Agriculture in Common Schools?

This question has been agitated, more particularly in New-England, for the last few years, and from the multiplicity of articles upon the subject in the papers from this quarter, we see is still up for discussion. Manuals have been prepared and those who publish school-books and understand the engineering necessary to get them introduced to the school, are the busy advocates of this branch of agricultural reform. To show precisely what is aimed at, we quote the words of one of these reformers as given in an agricultural address.

"Botany, or the study of plants, grains and vegetables, should be a prominent study in our common schools, commenced with the alphabet, and continued to graduation, so that every boy and girl 14 years of age, can not only tell the growth and food of every grain and grass and vegetable, but also what soil and season, and fertilizers are best for it. Chemistry also should be studied from the earliest period to the latest, as we now study arithmetic and geography. It is vastly more important for a person to know the prime gases than the prime numbers. Arithmetic, geography, and grammar, are studied to the neglect of other more important and attractive branches of knowledge. Teachers should be trained in our Normal schools not in Algebra and geometry only or chiefly, but in botany and chemistry, and meteorology."

If we understand this reformer aright, he would have all the natural sciences which have a bearing upon husbandry taught in the free schools, and have the children indoctrinated in these sciences, by the time they are fourteen. Botany is of no more use to a farmer than zoology, entomology, geology, and perhaps we should add ichthyology and conchology. If it is profitable for him to understand the science of plants, it must also be useful for him to know something of the insects that destroy them. Fish and shells make excellent manure, and so would come appropriately under the young farmer's studies. But these are only the auxiliary sciences to the great study of husbandry, a business that requires more varied knowledge than almost any other avocation.

The unreasonableness of the demand of these reformers is apparent, if we consider that children in the free schools have already more studies than they can master in the brief period of attendance. It is not profitable or hardly safe to send a child to the drill of the school room before he is seven years of age. Before this age, his best place is in the nursery and the open air, attending to physical growth. Surely, the seven years previous to fourteen are not too long a period to master the branches usually taught in the free schools. A farmer should know how to read and write well, or he might not be able to keep posted in the various branches of natural science, after he commenced business. He should be ready at figures, or his pecuniary affairs might suffer loss. The farmer sustains certain relations to society and is as liable as other men to be called to fill positions of trust and responsibility. It is therefore important that he should know how to use good English, whether he get the "prime gases" in due order or not.

The natural sciences are appropriately studied in our higher schools and colleges. Men and women of adult years and with all the advantages of laboratories, collections of specimens, accomplished lecturers, and months if not years of study, are only able to get the first principles of these sciences. So little progress is made in the ordinary college course of

study, that unless a young man has a peculiar taste for these studies and pursues them zealously in his vacations, and after graduation, they are never of much practical value to him. They make him more intelligent, and the discipline is valuable, but he does not so far master these sciences in his college course, as to make them of much use, or to make him a fit teacher of them. How then can it be expected that a child of fourteen is to get knowledge enough of these sciences to be of great advantage to him.

We have not the teachers of requisite knowledge to instruct children in these studies, even if it were desirable. Most graduates when called to teach any one of these branches as a specialty, feel the need of extra preparation and training to fit them for their work. Much less then could it be expected of our common school teachers, to instruct our children in sciences they have never studied. It would take years of special training to prepare them for it, and when they were fitted they could not afford to teach at the wages now given in the free schools. Higher qualifications in the teacher, of course imply the necessity of higher remuneration.

Then we have not the conveniences for teaching these sciences in our common school houses, and can not have them without a total change in our system of education. The teacher of chemistry needs his laboratory with some apparatus, lamps, retorts, blow pipes, jars, earthen, metals, etc. All the natural sciences need apparatus and specimens, to be studied with profit. We can not have these in the school house, for it is not built for the purpose. Any effort to introduce these studies would naturally divert the minds of the children from the branches commonly taught, which are necessary for all classes. It would result in a smattering of knowledge without thoroughness in any thing.

Then it would inevitably provoke the jealousy of other classes not engaged in farming. The shoemaker and the blacksmith would be afraid that the children of farmers would have more than their share of the teacher's attention, if the study were optional; and if it were compulsory, it would breed a rebellion, and oust the teacher or school committee. Every one who has had much experience in the management of these schools, can see that the thing would not work. It is a common school, and only for those studies which are the common want of all.

We want as a preparation for entrance to agricultural schools, pupils well drilled in the branches now taught in the common school, and the time now allotted to these studies is none too long. Farmers should stand upon a level with other classes in these studies, as well as have special knowledge of their own business. This will have to be learned in schools specially devoted to agriculture, and upon the farm. Though this will not be so well for manufacturers of school books, we have no doubt it will be better for farmers. A NEW-ENGLANDER.

REMARKS ON THE ABOVE.—It appears to us that in the above article the writer has taken rather too strong ground, though probably right in the main. The common branches, reading, writing, spelling, arithmetic, and geography, should certainly be the first studies, and be well mastered. But along with these, partly as a recreation perhaps, may well be introduced easy primary lessons in chemistry, in what is termed Natural Philosophy, in botany, physiology, and geology. The teacher is poorly fitted for his or her sphere of labor who can not give to a whole school at least some "talks" on these branches. If not prepared to do so, he should

omit some evening parties and "study up." Fifteen or twenty minutes time in the school room daily devoted to a short talk on these branches, will scarcely retard progress in other studies, and will afford a pleasant relief to both scholars and teachers. A little knowledge of the elements, of physiology or the care of the body, of the first principles of natural philosophy, of botany or the structure and growth of plants, of geology or the way soils are made up and arranged, will awaken interest and inquiry, cultivate a taste for these studies, and beget an important habit of observation—to say nothing of the practical utility to the future citizen, of even a little such knowledge. The trite saying, that "a little knowledge is a dangerous thing," is false as a rule. *The great mass of children will never get any idea of these useful and interesting sciences, if it be not got in the common school before the age of fourteen.* A few ideas inculcated there, will lead to useful reading, thought and investigation, afterward—to the less reading of trashy, exciting novels.—Not much apparatus is required. A few very simple experiments are enough to awaken interest, and explain the first principles. The best chemistry class we ever examined was one of boys and girls in a common school, from 12 to 16 years old. The teacher expended on simple materials, \$8, contributed by a few individuals. The first electrical machine we ever saw (and a very effective one it was), we made while yet in the public school, with materials found wholly on the farm, except a single glass jar for the main cylinder. For a guide we had an old Comstock's philosophy sent as a present by an Eastern friend.—O. J.

### Profit of Sheltering Manure.

It is now pretty well settled by the experiments of intelligent agriculturists, that manure protected from the weather is much better than that which has lain for six months or more in the open yard. Every farmer who has cleaned out under his stable floor where there was no cellar, or has used the manure made on the floor of the sheep barn or shed, has had occasion to suspect as much. Crops fertilized with such protected manure started with great vigor, showing a dark green color, and pushed on rapidly to maturity. There must be something in such manure that the unsheltered article loses.

An English experiment shows that manure which was kept covered by nine inches of earth, produced several bushels more of grain per acre than the same amount of manure applied to the same extent of land, but which had lain exposed to the weather during the Winter. Another experiment shows a difference of about four tons or nearly one hundred bushels, between the produce of two acres in potatoes, the one of which had 20 loads of covered, and the other 20 loads of uncovered manure.

A gain of fifty bushels of potatoes to the acre, just from the difference in the quality of the manure, is worth looking after. It will be seen that this is nearly all clear profit. There is no more expense for seed, for handling manure, or for tillage. The only additional item would be the increased labor of harvesting. The conviction that the housing of manure is good economy is pretty general, and yet not a fourth part of our farmers pay any attention to it. The open yard without a barn cellar, and even without sheds, is still a very common spectacle.

The best substitute for lack of cellar is a covering of earth, or *muck*, for the manure, as fast



as it is collected. If the open yard were kept well supplied with muck, and the manure were to be plowed under every month but without draining off, it would not waste much. Where straw is plenty, as in the wheat growing districts, it makes a very good covering for manure. This is the practice of some of the best managers. But it requires a much larger quantity of straw than most of our farmers have for litter. The straw is thrown out frequently, and the yard is kept nearly dry for the cattle to lie on. Muck usually costs nothing except the drawing and hauling, and rightly managed it makes a good protection for manure. It should be scattered frequently over the yards and under the sheds, and the heaps kept well covered.

**A CAUTION.**—A Canadian subscriber to the *Agriculturist* complains that he has followed our advice, and that his manure dried up, heated, and was nearly spoiled—in other words it “fire-fanged.” This reminds us to repeat, that while no liquids should be allowed to run from the manure heap, it *should always be kept moist*. The heap should be frequently examined, and if found drying out, water should be added. The best plan is to pile the manure in a tight vault or excavation that will hold the liquids. If not under a roof, a cover of loose boards will answer, as a little rain falling through will do no harm. Then, as often as needed, pump up or dip up with a bucket, the liquid from below and spread it over the heap. This liquid manure will hasten the decomposition of the straw and other coarse materials, and all the heap will be equally rich.

#### The “Dakota Potato,” or Ground Nut.— (*Apios Tuberosa*.)

To the Editor of the *American Agriculturist*.

This plant, Eaton, in his *Botany*, more than thirty years ago, said: “ought to be generally cultivated.” And it appears by the December *Agriculturist*, others have taken the hint, as well as the undersigned, in making the trial. Six or eight years ago I procured some of the tubers from the State of Maine, and some also from this immediate vicinity, (Middletown, Ct.,) and planted them in my garden, but I am sorry to say my success has been poor indeed. So far as my own experiments can be relied on, they do not appear to improve by cultivation, in the least, nor even to grow as well as they do in the wild state. I have not yet been able in my garden to produce tubers as large as are often found in their native situation. I purpose to continue the experiment a few years longer, however. J. J.

#### Sweet Potatoes in Ireland.

“Hibernia” inquires if sweet potatoes will flourish on his farm near Belfast, in the North of Ireland. We judge not. If we remember rightly, the soil thereabouts is not sufficiently sandy and warm. A light, moderately sandy, warm soil suits this crop best, though we have grown them well on a pretty stiff loam, by high hilling. Probably, however, the soil would answer, if there were sufficient sun light. In the sea-girt islands of Great Britain the air is almost always moist, and bright skies, warm clear days, such as the sweet potato flourishes best under, are not the general rule there. Perhaps the longer absence of frost, owing to the proximity of the never-freezing ocean, may in part make up for the less sunlight. It would be well to try the experiment. The common *Nansmond* variety can be purchased in our mar-

kets. These, packed in dry sand in a box, and kept from freezing, can be carried over at any time during Winter. Put them into boxes of earth in a green-house or hot-bed in March, and abundant sprouts will start out. When 6 to 10 inches high, break them off from the tuber, keeping as many fine roots on the stems as possible, and transplant out into high hills or ridges, when the soil is warm and danger of frost past. The ground should be well supplied previously with thoroughly rotted manure. For directions, see *American Agriculturist* for April, 1862, (vol. 21, page 108), and an article to be published a month or two hence.

For the *American Agriculturist*.

#### An Iowa Corn-Marker.

Iowa is well adapted to the cultivation of corn, yet many are so careless that weeds often get the mastery, hence they get a poor remuneration for their hard toil. One great reason is, that after fitting the land for seeding, they spend several days in “furrowing out each way,” with a shovel plow, jogging along in a zigzag manner, so crooked that a squirrel can hardly find the rows after it comes up. This requires much labor, and is of no benefit except in making easy planting. The corn is placed too deep to feel the warmth of the sun when it needs it the most, and the farmer has to wait too long for the corn to get large enough to keep from covering it up the first time through with a plow or cultivator. Corn needs light, air, and warmth to vegetate and grow rapidly; to obtain these abundantly I can not think a deep furrow favorable. My way is to plow deep and harrow lightly to level the surface, then make a marker after this fashion.—Take two hardwood poles, or scantling, fourteen feet long, lay them parallel, and pin to them at right angles four blocks two feet long and two inches thick, at a distance of three and a-half feet apart. Slant off the front ends of these blocks, making them like sled runners. Turn the apparatus over, fasten a tongue to the middle of front pole, and the marker is complete. Hitch on the horses, take your place on the center of the marker and drive on until the field is marked in one direction; then cross-mark in the same way. Stakes should be set at each end of the lot to guide by, instead of merely trying to run parallel with the last mark. Fifteen acres can thus be marked each way in a day.

C. J. RHODES.

Tama Co., Iowa.

#### How Corn is Made in Egypt (III.)

[The following plain, straight-forward account of the common mode of cultivating corn in Southern Illinois, from Wm. O. Marvin, of Randolph Co., will give a partial picture of farm life there, and perhaps afford a hint or two. The plan described is doubtless susceptible of improvement. A brief description of the methods pursued in different sections, not only with corn but other crops, would be useful to others.]

“We prefer for Indian corn, wheat stubble unbroken until plowed for planting in the Spring: First, the cut worms trouble it very little; second, should the season be dry it bears the drouth much better than our other lands; and third, such land is most easily kept clean. The plowing should be at least eight inches deep, and all the growth of weeds and grass be turned to the bottom. After it is well broken, we lay it off one way in rows four feet apart, and 5 to 6 inches deep, with a one horse plow. It is

then crossed with the marker, making six rows to the round. Our children usually drop the seed. Some cover it by throwing on one, and some two furrows with the small plow, and just before it is up, harrow it down level. Others cover with the harrow alone. Others cover by dragging a suitable flag stone across the rows, which is by no means a bad way, as we have no stones in our fields to interfere with culture. But we think the hoe is the best implement of all to cover with, and this is the only use we make of the hoe in producing the crop.

When the corn is up so that it can be worked, we remove the front tooth (or share) from a cultivator, and with a span of horses run it astride the rows, first one way, and then across. This works the soil between the rows, and close up to the hills, in both directions, leaving it clean and in a condition little inferior to the best hoeing, and the hills are made around the corn. [This lets in the sun to warm the roots and promote their growth.] The labor is not half that of hoeing. The after culture depends upon circumstances. If rains harden the surface, the plow may be required. After plowing, a one-horse cultivator is run between the rows to level off the surface, as we prefer flat culture to high ridging around the hills. By the above process we get, in common years, from 40 to 60 bushels per acre, according to the quality and condition of the soil.”

#### Change the Locality of Seed—An Example of Selection.

A contributor to the *American Agriculturist* writes thus: It is the general testimony, of those who have tried it, that the productiveness of seeds of many crops—among which may be mentioned wheat, corn, and potatoes—is greatly increased by changing their locality. Will it not be well for farmers to bear this in mind now, and not wait until some unlooked-for delay may chance to embarrass Spring work? Perhaps the benefit is not owing so much to change in latitude or longitude, as to change of soil. If not, then it will do as well to exchange with some neighbor who has seed raised on a different soil. But what has been proved, is safest, and those who can procure seed from a distance should do so. It is not too early to be looking about, and making arrangements to that effect.

[That to change the locality of seed is beneficial, seems to be the general opinion, and therefore it is reasonable to suppose there must be something in it, though we do not understand why this is so, nor are we certain that the popular opinion is not an erroneous one. On our old paternal homestead the same varieties of wheat, corn, and potatoes, were grown continuously, perhaps for twenty years or more, and instead of deterioration in quality or product, there was a constant improvement, so much so that most of the wheat raised was in demand for seed. A system of selection was followed. No potatoes smaller than hens' eggs, and no over-grown tubers, were planted. The seed wheat was obtained by hand-screening, with a sieve made specially for the purpose which retained about one third of the largest and plumpest kernels. The two-thirds passing through the sieve was still first grade in the market, at least after this selection of seed had been practiced a few years. Ed.]

Why is a woman mending her husband's clothing after he has retired to rest, like the enemy of the human race? Because she is sowing tares while the good man is asleep.



SPECIMENS OF GOURDS AT THE "AMERICAN AGRICULTURIST EXHIBITION."

1. Valparaiso Squash. 2. California Squash. 3. Hubbard Squash. 4. Crook-neck Squash. 5. Turban, or Turk's-head Squash. 6. Golden Winter Scallop. 7. Vegetable Marrow. 8. Green Striped Bush. 9. Lagenaria Viliata. 10. Gourd from Hindostan, new. 11. Mock Orange. 12. Pear Gourd. 13. Sandwich Island Gourd. 14, 15. Unknown. 16. Hercules' Club. 17. Artichoke Gourd. 18. Long Orange Gourd. 19. Cucumis Dipsacius, Japan. 20. Cucurbita Striata. 23. Bottle Gourd. 24. Boston Marrow Squash.

### The Gourd Family.

Few persons, except professional seedsmen, have an idea of the number of varieties belonging to the gourd tribe, named *Cucurbitaceæ* by botanists. Until recently, comparatively little attention has been paid to their cultivation, except in the case of the squashes and pumpkins, which occupy time-honored places in the garden and the field. Within a few years, fancy and ornamental gourds have been coming into favor for decorative purposes, and their number and beauty have been greatly increased by importation from foreign countries, and hybridization with old varieties. The recent exhibition of these vegetables at the Office of the *American Agriculturist*, called out a most beautiful display. About one hundred different kinds of the gourd family were represented, from the Mammoth Valparaiso Squash weighing 270½ lbs., to the diminutive striped gourd, that when full grown scarcely equals a black walnut in size.

The above engraving, drawn from specimens at our exhibition, shows some of the more curious and otherwise noteworthy varieties. Part of these will be recognized as established favorites in the garden and on the table: others are new and striking. The specimen numbered 5, the Turban Squash, bears a striking resemblance to a Turkish head-dress, and from its beautiful coloring is a most attractive object. It is also edible, and by some considered to be of fine quality. No. 13, the Sandwich Island Squash, was trained while growing, into a good resemblance to a swan without wings; the bill is well represented by the stem. No. 10, is a new and singular specimen raised by W. F. Heins, from seed sent to the *Agriculturist* office from Hindostan. From its pungent quality we suspect it belongs rather to the capsicum family

than to the cucurbitæ. No. 19, might be called the 'vegetable caterpillar.' It is about three inches long and half an inch in diameter, of bright green color, and thickly studded with stiff hairy spines. It was grown from seed received from Japan. We have no knowledge of the use made of it there. It forms a unique ornament. No. 18, the long orange gourd with dark green bottom, is one of the most pleasing varieties for ornament. The vine trained upon a rustic trellis or over rock-works in some corner of the grounds, is a beautiful object when laden with its rich parti-colored fruit, and the gourds when ripened are very attractive. The markings of green are varied with each specimen, making them still more pleasing. The different kinds of gourds are so easily hybridized, that it is less difficult to procure an almost endless number of sorts, than to preserve any desired variety true to the original. It can only be done by covering the flowers designed for seed, with some protection against insects, and fertilizing them with pollen of their own species. A single bee entering a blossom may bring with him pollen from several different species gathered in other localities, and thus impregnate the flower and cause its seed to vary.

Attractive as are the ornamental features of the gourd family, most of our readers will be more particularly interested in edible varieties. For excellence both as a sauce and for pies, the Hubbard squash (No. 3 in the engraving) still remains at the head of the list. It has made its way but slowly into the markets. Its dark green color gives the idea of unripeness, and we have known parties growing it for the first time, to throw away the fruit and pronounce it a humbug, supposing the season to be too short for its maturity. But after having once become acquainted with its excellence, its color is no

longer an objection. Next to the Hubbard stands the Boston Marrow, already so well known as to need no description. With this, perhaps, even superior to it for pies, the African squash takes rank. It is much larger than the Marrow, but this is rather an objection for ordinary family use. One specimen could hardly be wholly used before spoiling.

The cultivation of squashes and pumpkins is not difficult, though a few important particulars must receive attention to secure the best results. Being mostly natives of tropical climates they should have a warm situation, as a southern exposure, or under protection of a building or high wall. It will be very advantageous to start them early in a hot-bed or in the house, and transplant them when they have attained the third leaf. Of course, there should be great care to leave the roots entire, and the earth around them undisturbed. An easy way of accomplishing this is to scoop out large turnips, fill them with rich earth, and plant one seed in each. When ready to transplant, cut off the bottom of the turnip, and the roots will soon find their way out; the remaining substance of the turnips will decay and feed the plants.

The best soil for growing these vegetables, is a deep, warm, sandy loam, well enriched with stable manure. Not only should the hill be made rich, but also the surrounding soil where the vines will send out rootlets to gather nourishment. Too little room is usually allowed to each plant. They need space enough to run without crowding and shading each other. The area required will of course depend upon the kind cultivated. It is a good plan to sow at intervals a number of extra seeds in each hill as food for insects, which will attack the young plants, and leave the first to grow too strong to be consumed by them. They can be easily thinned



out as needed. More minute directions for treatment of the vines will be given at the appropriate season, in our Calendar of Operations.

### About Earth or "Angle" Worms.

The common earth worm (*Lumbricus terrestris*), has no eyes, feet, or other external appendages, and the head differs from the tail only in being more narrow and pointed. Its stomach consists of two pouches, and the alimentary canal extends from stem to stern. At about one third of its length from the mouth, there is a sort of belt, encircling the body, consisting of from six to nine rings, among which lie the organs of reproduction. As the worm is hermaphrodite, each individual carries this belt. It has the senses only of taste and touch, the latter being acute, as everybody knows who has touched it on peering from its hole. Its taste is coarse, since it feeds upon the soil it lives in, swallowing it and its half-decayed organic substances, and passing them through its body.

It is not certainly known whether these worms breed oftener than once a year. They produce their young sometimes from eggs, and sometimes already hatched. The eggs are laid at a considerable depth in the ground, and in clusters. They are laid mostly in the Spring, and hatched in June or July. The egg is about the size of a pea, elliptical, with a tubular hole at one end, through which the young escapes. In the cut annexed, *a* represents an egg, *b* the same after the embryo becomes visible, and *c* the same with the worm beginning to shift for itself.

The common notion that if this worm be cut into any number of pieces, each portion will live and soon become a perfect worm, is hardly true. But if any part of its body be cut off behind the belt, the remainder will be reproduced. If, however, it is cut in two at the belt, or between the belt and the head, it is sure to die.

The natural uses of the worm seem to be to furnish food for moles, frogs, toads, snakes, birds, fishes, and some kinds of insects. It is sometimes asserted that they are useful to vegetation, by boring the earth and loosening it, rendering it permeable to air and moisture, and even adding to the depth of the soil. But this is probably a mistake. The frequent boring of the ground makes the adjacent parts firmer. The worm-casts thrown up above the worm-holes are water-tight, and so prevent the descent of water into them. Their subsoiling does not amount to much. On the other hand, they do positive injury. They disfigure walks and lawns by their casts, and eat into roots of plants, especially those which are feeble.

These worms can be destroyed wherever they congregate in considerable numbers. As they are quite thin-skinned, any hot or caustic liquid will kill them. An excellent caustic is made by dissolving quick-lime in water, at the rate of half a pound of lime to six quarts of water, to be applied through a common sprinkling pot. Wherever worm-casts appear, sweep these off with a stiff broom, and then apply the caustic freely. In a short time, the worms will come to the surface, and die.

**VARIETIES OF THE HORSE-CHESTNUT.**—The number of species and varieties is greater than is commonly supposed. Beside the common one, with white flowers, tipped with pink, there is a scarlet, and a rose-colored, a double white,

Michaux's, Whiteley's red, a cut-leaved, and the common Buckeye. These belong to the genus *Aesculus*. If we include that of *Pavia*, which is smooth-fruited, we have a yellow-flowered, a red, a pendulous dwarf red, a downy-leaved, a purple, a flesh-colored, etc., etc. The scarlet is particularly fine. We have seen a striking effect produced by grafting the alternate limbs of the old white with the scarlet; the result was a brilliant, mammoth bouquet.

### Important List of Pear Trees for the Vicinity of New-York, Ripening in Succession through 5 to 6 Months.

In the previous volume we have frequently referred to the Fruit Growers' meetings held weekly at the office of the *American Agriculturist*, on each Thursday at 1 o'clock P. M. Though almost entirely informal in their character, the discussions of matters pertaining to fruit growing have been highly interesting and valuable.

Several weeks since we suggested to the gentlemen present, the desirableness of agreeing upon a list of varieties of pears for family use—with some regard to marketing, and to ripening in succession throughout the entire season—which could be recommended at least for the vicinity of New-York City. The importance of such a selection was urged in view of the greatly increased general interest in fruit growing, and from the fact that the list of trees grown by nurserymen has become so extended as to require no little pomological knowledge to select a good assortment from their crowded catalogues. We also desired such a list as a reply to very numerous inquiries from our readers for a list of good pears for family use, and for market.

A competent Committee was appointed, and a request made that as many as could make it convenient should present lists of 20 varieties, with the number of each recommended to make up an assortment of 100 trees. Such lists were furnished at subsequent meetings by Charles Downing, Parsons & Co., T. W. Field, W. S. Carpenter, A. S. Fuller, Dr. Ward, J. G. Bergen, and others, all practical fruit growers of large experience. These lists were compared and their merits fully discussed at six successive meetings. The following list was finally agreed upon and recommended almost unanimously. Reference was had specially to varieties known to be successful in the region of country around New-York City, but the list, with slight modifications, is valuable for the whole country:

#### LIST ADOPTED BY THE FRUIT GROWERS' MEETING.

2	Doyenne d'Ete.....	July 15 to Aug. 10
2	Beurre Giffard.....	Aug. 1 " 15
4	Tyson.....	" 10 " 20
10	Bartlett.....	" 15 " Sept. 15
4	Belle Lucrative.....	" 15 " 15
6	Flemish Beauty.....	Sept. 1 " 25
4	Louise Bonne de Jersey.....	" 10 " Oct. 10
4	Seckel.....	" 15 " 15
4	St. Michael Archange.....	" 15 " 15
6	Beurre Bosc.....	Oct. 1 " Nov. 1
10	Duchesse d'Angouleme.....	" 1 " 20
4	Bergen.....	" 1 " 20
6	Beurre d'Anjou.....	" 10 " 25
4	Beurre Clairgeau.....	" 15 " Dec. 15
4	Beurre Diel.....	" 15 " 1
4	Urbaniste.....	Oct. " Nov.
4	De Tongres.....	" Dec. 15
4	Winter Nelis.....	Nov. " Dec.
8	Lawrence.....	" " "
6	Vicar of Winkfield.....	" " Jan.

The Urbaniste was adopted with the understanding that it comes late into bearing, and the De Tongres was added as promising exceedingly well, though not sufficiently proved to warrant an unqualified recommendation.

The Louise Bonne, Duchesse, Beurre Diel, and Vicar, were considered best on quince, while

Bartlett, Flemish Beauty, Seckel, Beurre Bosc, Beurre Clairgeau, De Tongres, Winter Nelis and Lawrence, were recommended on pear, or double worked on quince. The remainder of the list may be on either pear or quince.

At first, strong objections were raised against the Vicar of Winkfield, on account of quality, but these were over-ruled by those who explained that they were not generally well ripened. Some specimens exhibited, though prematurely ripe, were pronounced really fine, with a sprightliness not found in many other sorts. Pears of this variety should be picked late, put in a cool cellar or other place, and be kept until the first or middle of December; then after exposing for one week in a moderately warm room, they color up finely, and are of fine flavor at a season when but few others are to be had. They can be kept back until the middle of January. The Vicar is one of the most vigorous growers and constant producers of large crops that we have.

There was much discussion over the Beurre Bosc—the nurserymen, while admitting all its good qualities, say it costs twice as much to raise as many other sorts, and they fear if a person plants out two-year old trees, he will lose half of them, so difficult are they to carry through the first few years of growth. After becoming established, and especially on branches of large trees, this sort does pretty well, and the quality of the fruit is of such excellence, that it finally received a strong vote.

Persons wishing to plant 50 trees can take half the various kinds named in the above list, or if they do not wish so great a variety, let them select from those having the highest numbers, keeping in mind the succession in maturing.

### For Peach Trees.

A correspondent of the *American Agriculturist* writes thus: B. F. Seaver of Orange Co., N. J., whose peach trees had not borne fruit for several years, had a good crop the past year, some trees yielding 3 to 4 bushels each, and the trees were very thrifty. He attributes his success to the application of a method recommended to him by Mr. Plummer of Newark. In early Spring, as soon as the frost began to come out of the ground, a teakettleful of scalding-hot water was poured over the crotch of each tree, (the crotch being generally not far up from the ground.) The water circulating round the trunk enters the ground, and kills the grubs which produce the "yellows" later in the season. A small puddle hole in the ground around the base of the trunk should first be made, to hold the water as it falls, and if you will examine afterwards, you will find the dead worms. You can't have the water too hot, and need have no fear of injuring the bark of the trees. Of course the excellent fruit season had much to do with the large crop realized last year, but as several duplicate trees of previous years, in the same locality, had died of yellows, it is reasonable to suppose the above operation had a good effect. [We can not affirm that the hot water was useless, but we can hardly see how it could be beneficial. It could not of course run up into the holes of borers, and if it did, it would not be hot enough to disturb them after running down the trunk. Other insects would hardly be found on the surface at a time when the frost is just coming out of the ground. A continuous stream of hot water would be likely to soon destroy the vitality of the bark. Perhaps we are wrong, but without the success of the method in other years than the past one, we should not recommend it for general adoption.]

### Curious Trees.

Useful trees have their place, and so do ornamental trees. But in addition to these there is a class which may be called distinctively *curious*; and of these a few notes may be interesting:

The *Cow Tree* is a native of Venezuela, South America. It is often found growing on the poorest and most rocky soil. Its leaves are dry and leathery in appearance, and for several months of the year not a shower falls to moisten its roots and branches. Yet, by piercing the bark, it yields a liquid resembling milk, which is sweet and nourishing. At sunrise, this fluid seems to be especially abundant, and at this hour the natives go to the trees in great numbers to get their daily supply.

The *Sorrowful Tree* is found near Bombay, India. It is so called, from its habit of blooming only at night. While the sun is shining, not an expanded flower is visible; yet in half an hour after the sun is below the horizon, the tree is full of them. There is little beauty in them, though the odor is pleasant. At sunrise, the petals close up or drop to the ground. This tree, it would seem, must have some sort of relation to the night-blooming Ceres.

The *Dwarf Tree* is found upon high lands near Cape Horn. Its maximum height is two and a half feet, and the spread of its branches about four feet, and a stiff, thorny mat at that.

The *Mammoth Trees* of California, are worthy of note here. They are found three hundred feet high, and 29 feet in diameter at five feet from the ground. A hollow section of a trunk was lately exhibited at San Francisco, which presented a large carpeted room, with a piano and seats for forty persons. On a recent occasion, one hundred and forty children were admitted without inconvenience.

The *Ivory Nut Tree* is found in South America, and belongs to the palm tribe. The natives use it in building their huts, and out of its nuts they make buttons and various trinkets. Of late years, the nuts have found their way to other countries where they are worked up into all sorts of fancy articles.

The *Cannon Ball Tree*.—What can be more interesting than this tree in our warlike times! It's a pity that it grows only in the tropics. It rises about sixty-five feet high, has beautiful crimson flowers, in clusters, and very fragrant. The resemblance of the fruit to cannon balls has given it its martial name. When fully ripe, the balls burst with a loud report. The shells are worked into cups and a great variety of other useful and ornamental household utensils.

The *Bread Fruit Tree*.—Here is something useful, as well as curious. Would that it grew somewhere besides in the islands of the Pacific. The fruit attains the size of a child's head ten years old. If wanted for food, it needs to be gathered a little before it is fully ripe, and then baked, like hoeecake, in hot ashes. When properly cooked, it resembles not a little the taste of a good wheaten loaf. Nor is this the only use of the tree. Its timber is excellent for house-building, for making canoes and agricultural implements. The sap is a gummy substance, very useful as a pitch for caulking the seams or vessels. The fiber of the inner bark is used by the natives for making cloth, which in that climate answers a good purpose. It is the favorite tree of its native region; and well it may be.

The *Upas Tree*.—The "deadly Upas," of which we have all read and heard from childhood, which was supposed to diffuse a poisonous air, fatal to animals or men who came beneath its

branches, has no existence, and never had. The only possible ground for the superstition was this: On a certain island of the East Indies, there is a valley in which there is a constant deposition of carbonic acid gas. This gas spreads itself among a few trees of the neighborhood, and of course, if birds, animals or men inhale much of this gas, it will quite surely be fatal to them. But this is no fault of the trees, which have been found to possess no poisonous quality.

The *Tallow Tree* is a veritable fact. It lives in China, and yields an oily substance resembling tallow, and which answers well as a substitute for it. The tree is of only medium size, at maturity. It would not be hardy in America.

The *Varnish Tree* is Japanese, though found, also, sparingly in China. This is the tree which produces the black Japan varnish, so useful an article of commerce. It resembles, in general appearance, the white ash tree of this country. It does not furnish its peculiar liquid in large quantities, until nine or ten years old.

### Tree Planting Societies.

Several years ago, mention was made in the *American Agriculturist*, of a Rural Art Society established in one of our towns, the leading object of which was to encourage planting roadsides and yards with shade-trees, and to foster a general public taste for rural improvement. This article was copied into an influential paper in London, with a commendatory note by the Editor. A year after, a gentleman who had read the article, was led to recall and re-read it. His reading set him a-thinking, and his thinking set him a-writing. He wrote several articles, urging the rural embellishment of London and the surrounding villages. Other pens became enlisted in other parts of the kingdom, the subject got a good airing, and something practical is likely to grow out of it.

One of these articles urges the formation of rural societies like those in America. Here are a few sentences: "The idea of promoting these objects by an association is a happy one; and in this age of co-operation, such a society can easily be established. Owners of property in and around villages would belong to such a society, because the embellishment would enhance the value of their property. Men of taste would belong to it, for the gratification it would afford them," etc., etc. So it would seem that the good seed sown by our agricultural papers, often springs up and bears unexpected fruit.

For the *American Agriculturist*.

### A Farmer on our Native Forest Trees.

MR. EDITOR: It seems to me that there is too much of a rage for foreign trees and plants, to the neglect of the productions of our own country. I know, indeed, that *all* the good things are not confined to this nation, but I believe we have enough for our own use. Not a few persons are fond of having a root or cutting of something which once grew on a famous man's estate in England or France—no matter whether it is adapted to our climate or not. They are forever hunting after something rare, something uncommon, something which ordinary people can not hope to possess.

Now, I go in for the natives. We have here at home enough, and more than enough, to satisfy every reasonable desire and taste. If a person wants to increase his variety, here is opportunity enough. The fact is, only a few persons know what a long and varied catalogue we pos-

sess. The planters and nurserymen of England and the Continent are continually sending over here for our trees and plants, knowing them to be the finest that the world possesses: but are they not as good for us as for them? If you should send an order to any intelligent nurseryman in England, for a dozen of his best ornamental trees, irrespective of their origin, and adapted to a northern climate, rest assured he would send you, among others, the cucumber tree (*Magnolia acuminata*), the tulip tree, white elm, sugar maple, hemlock, and white pine, all of them indigenous to North America. That's worth thinking about.

Then, there is a certain claim of self respect. If a person is continually undervaluing his own, and hankering after the things which others possess, it indicates weakness, and it lowers him in the estimation of others. Now, if we respect ourselves as Americans, I think we shall put a due estimate on our own possessions; we shall feel a sort of national pride in them. For one, I feel proud of whatever belongs to us as a people. Our country, in its vast extent and resources, in its scenery and climate and people, is one of which we may well think highly. Our civil and political institutions cost us a great deal to purchase, and now, much more, oh, how much, to maintain and preserve! Now, sir, I can't help appropriating somewhat of this national feeling to our native productions—to our very grasses, and grains, and fruits, and trees. I dearly love them, because they belong to my own native land. Let us all prize, more and more, the trees which clothe our hills and adorn our valleys, and the vines, shrubs, and plants, which smile all over the landscape. FARMER.

### Hints from Mr. Loudon.

In turning over an odd volume of Loudon's Magazine, lately, we met in his description of a country seat, a hint or two worth recording:

"Here we found *Thunbergia alata*, in great luxuriance, sowing itself every year, a proof that it may be treated as an annual. *Maurandya Barclayana* here, as in some other places, is found to be perfectly hardy. The top dies down to the ground in the Fall, but new shoots spring up vigorously in the Spring. And this we presume will prove to be the case with a multitude of other plants which we have not tried.... The collection of choice shrubs and ornamental trees here is remarkable, considering the limited extent of the place, the secret of which is, that few common plants or duplicates are admitted.... There is not a greater mistake, in planting pleasure grounds, than the mixing of the common or indigenous shrubs of the country with foreign or improved species. It is as bad in a garden, as it would be in architecture to mix Grecian ornaments with Gothic ones." He also speaks of thorns being tied around the stems of young trees to guard them from animals. Also, of certain plants which require an abundance of light, but can not endure the direct rays of the sun; these are accommodated by being set where they get only the light reflected from a high wall which had been whitewashed. Query: Would not this answer for rhododendrons and laurels?—Lastly, he publishes the letter of a head-gardener who, in speaking of the trenching of the ground done for planting a lot of young magnolias, says: "The subsoil on this place we have not yet been able to prove, never having gone down deeper than five feet; but to that depth, it is all sandy loam." Think of that, ye American trenchers! Only five feet down!



### Land on Slopes of Steep Hills.

A subscriber of the *American Agriculturist*, in Pittsburgh, Pa., inquires "what to do with a plot of ground on a hill side, above a stone quarry that prevents building a stone wall around it. It has a stiff clay subsoil, resting on a layer of red greasy clay. The surface soil is inclined to 'slip,' but if it can be improved it is valuable for a graper."—Probably bastard trenching, that is, digging it deeply but not inverting the soil, and placing under-drains and surface drains so as to carry off washing water, would put it in shape for tillage. The grape vine roots, after once filling the soil, would help keep it in place. In some favorite grape localities along the Rhine, where peculiar qualities of wine are produced, but where the surface lies but a few degrees from a perpendicular, they even go so far as to place baskets of earth among the stones and rocks, and fill up between them with soil. The baskets hold the earth until the grape roots spread, and take their place as they decay.

On the steep side hills' around Stuttgart, in Wurtemberg, in many places along the Rhine, and among the hills between Lyons and Geneva, and in other places in Switzerland, France, and Germany, we examined vineyards upon the sides of hills that were naturally so steep that one could scarcely climb them. The usual method pursued is, to build stone walls along the hill, a few feet or rods above each other, and level off a plot of soil between the walls, making a succession of terraces. Stone and bush drains are provided to convey currents of water that would otherwise wash down the soil. On the steep, high hills over-shadowing Stuttgart on the south, the terrace walls are of almost regular solid masonry, with cut-stone gutters to convey the water. The cut-stone steps leading up through the plots are in many cases laid solid, and hollowed out to serve as water courses during heavy rains. Large sums have been expended in thus making artificial soils, but the luxuriant crops of grapes, such as we saw growing, doubtless pay a good interest on the original outlay. These steep hill sides, especially when the soil is worked deep, and thus thoroughly drained as it must necessarily be, seem to be just the places grapes most delight in. There are many such localities in our country. Hill sides, now worthless, may be fitted up for vines, with little more labor than it would pay to expend on any soil devoted to successful grape growing. Any suggestions on this topic, such as would help our Pittsburgh correspondent, and others similarly situated, will be acceptable.

### A Compliment from John Bull.

In these days of trial, when England turns the cold shoulder to us, it is comforting to recall the pleasant things she has said and done in former times. Here is a morsel: Several years ago, when Mr. Loudon was giving instruction to a committee of gentlemen in reference to the embellishment of a public park, he said: "In that portion of the Park where it is desirable that the greatest beauty and interest should be created, the trees of North America should be planted. To these may succeed the trees of Greece and Italy; next, those of France and Germany; then, the British trees; and lastly, those of the north of Russia, and of Sweden and Norway."

One would have thought that British trees would be placed high in the list; and that those of the classical lands of Rome and Greece, if

not also those of France and Germany, would precede those of our own wild, democratic country. But lo! our trees are put at the head of the catalogue of all the nations!—How about our men and women raised on the soil that grows these trees?

For the American Agriculturist.

### On Fitting up a Home—Confessions of an Amateur.

Every fruit grower and gardener has to educate himself, and generally pays very dear for his education. Multitudes get possession of the house, and a home lot, and the means to adorn it, before they get the knowledge requisite to lay out their money to good advantage. Many go ahead without consulting architect, artist, or gardener—build, lay out grounds, plant trees—for it is the weakness of a Yankee to the manor born to think that he can do almost anything as well as if he had never done anything else. Such go-ahead improvers after a few years' labor begin to get hold of the principles of landscape gardening, especially if they travel much, and observing other well kept places, discover that they have made several blunders, if not more. The gate is in the wrong place, the carriage drive has taken the wrong turn, the Norway spruces hide objects that ought to be seen, and a good deal is brought into view that were better hidden. He has at length educated his taste so that he can enjoy nothing that he has done, and he has to "change his base" and begin again. The walks are moved, new hedges are planted, half grown trees are transplanted, some are cut down, fruit trees are thinned out, and the work of years is destroyed in a day. Many can never summon resolution enough to make the change, and go on cherishing the blunders of their early years. They have gained a good deal of knowledge by their experience, but it comes a little too late for them.

I do not come altogether under this latter category, for I have already changed many of my blunders, but a few, alas! must remain for another generation. I am willing to put some of these blunders upon record for the benefit of those who are just building new homes or beginning to improve them. First, then, is the neglect of the architect and the landscape gardener. There is a wide spread prejudice against these characters, probably from the fact that both professions have their unworthy representatives, miserable pretenders who do not understand the first principles of their business. But Downing has his worthy successors, and the man who wishes to avail himself of their aid, can easily find them. Two or three hundred dollars seems a large outlay for the plan of a house and outbuildings, but in an expenditure of fifteen or twenty thousand dollars, or even half that sum, it is of trifling importance. The plan determines the character of the house, and the comfort of the household for their whole lives. A door in the wrong place, or the want of one in the right place, is matter of daily annoyance. Bad arrangements in the kitchen and dining room make a great deal of unnecessary labor for which you have to pay. The lodging room and nursery upon the second or third story, instead of the first, make a multitude of weary footsteps for the wife and mother already overtaxed. The continued health of a wife and well being of children may depend upon so small a matter as the right location of a bedroom. No rewards are better earned, none are cheap-

er to the purchaser, than those of the architect who plans a house to meet the wants of your condition in life and your family. The problem to be solved varies with almost every family. It is the business of the architect to study these wants and to meet them in the most economical manner. Many, more than save the price of their services in the increased economy which they secure in building, and in the future labor in the household. Some houses are so badly arranged that it requires three servants to do the work which two would easily perform in another.

The arrangement of the grounds around the dwelling is another, of less importance indeed, but still not to be overlooked. Every gem wants its appropriate setting, and a tasteful house may be half spoiled by its surroundings. We want the apples of gold in pictures of silver. Trees and shrubs may be so planted as to lighten the charms of the dwelling, and to give it additional shelter and warmth in Winter. They may be so arranged as to command the most beautiful objects in the distance, or to obstruct the view. One of my neighbors has entirely buried himself up in his trees. His home stands on an eminence commanding a beautiful view of the distant sea and its islands, but he can not see a sail from the window of the sitting room, where the family spend most of their leisure hours. The windows look out pleasantly upon a lawn of four or five acres. But a large clump of evergreens completely obstructs the view. He is sheltered indeed, but he has cut off the cheerful light of the sun, and the pleasing aspects of nature around him. He might have bid defiance to the winds, and at the same time have wooed the sunlight. He is surrounded with green fields but he can hardly get a glimpse of them.

This may seem to be a small matter to people without taste, but it has a good deal to do with the happiness of the family. We ride miles to get a pretty view from the summit of a hill, and enjoy the whitening sails of the sea, or the steamers that leave behind them their long trails of smoke. Such a view, or any other pleasing prospect, would seem to be worth preserving at home. I am a little old-fashioned in my tastes, but really, I prefer to have these pictures out of doors, rather than their imitations upon the walls of the parlor.

Twenty years ago, I planted a clump of evergreens, mostly Norway spruces and hemlocks, to hide a neighbor's barn across the way. They have grown wondrously, and more than accomplished their object, for they have hidden a glimpse of a sheet of water that lies at the foot of a hill a mile away. The trees are too beautiful to be cut away, it would be sacrilege to trim them, and I am in a quandary to know what to do with them. In tree planting, one needs to look ahead a little, and see what a tree will become when it is well developed. Smaller evergreens would have hidden my eyesore, and saved my lake. HENRY HERBERT.

### Culture of the Pansy.

Few flowering plants give greater satisfaction than the Pansy. Less brilliant and showy than the verbena, petunia, scarlet geranium, and the like, it yet has excellences to which they can lay no claim. It is easily cultivated, requires little or no protection in Winter, commences blooming early in Spring, and with a slight check in the heat of mid-summer, continues in flower all the season, and furnishes an almost endless variety of colors, shades and markings. In answer to many inquiries about the prepa-

ation of the soil and general management, we quote from an English work on the Pansy, which is the highest authority in that country: "The results of various experiments relative to the growth of this flower, amount simply to this, that to produce fine, large blooms, due attention must be paid to soil, situation, and often transplanting. Young plants are generally found to produce the largest and finest marked blooms.

#### Soil and Situation.—

Pansies delight in a cool, shady situation, and in a light, rich, loamy soil. A composition of good loam, enriched either with rotten dung, or leaf or vegetable mold, will grow them in the highest perfection; yet they will grow well in any good garden soil. But by using proper earths, often transplanting, and due attention to shading, situation and watering, you may have a succession of fine, large blooms for nine months of the year." (Nine months of the English year, of course, but not of our colder country and of our shorter season.)

To the above, we will add that, in our own experience, a deep soil, enriched heavily with well decayed cow-dung, mixed with a little sand, leaf-mold, and common earth in equal portions, makes the perfection of soil for this favorite plant. Shade, for part of the day, is quite desirable. The seed may be sown in the open ground, in September, where they will get a good start before Winter sets in, and they will make a fine show the following season. Or seed may be started in March or April in boxes in the house, or in a hot-bed, and then transplanted into the border as soon as Spring fairly opens. They should be set a foot apart in the beds, at which distance they will soon cover the ground.

#### A New Convolvulus.

The engraving above will give some idea of a new trailing plant from southern Europe, recently introduced into florists' collections. It is known in the catalogues by the alarming name *Convolvulus Cantabricus stellatus novus*—in plain English, the new Spanish Star Morning Glory. The flowers are of a beautiful, soft, pink color, with a pure white double star in the center, and being produced in the greatest profusion, it forms a fine bedding plant, either as an edging, or in an isolated bed. It is peculiar-

ly adapted for vase edging for rustic stands or boxes. The most pleasing disposition of it, however, will be in a suspended pot or basket in the sitting room, where its bright petals and gracefully drooping runners will give a charming aspect of cheerfulness. It is said to be

vines and flowering plants mingled together, each striving for the mastery; but a flower garden is, and should be, something quite different from natural scenery. It is designed to cultivate plants better than when growing wild. Every experienced gardener knows that few

plants attain perfection when overhung and shaded by trees, or in a soil penetrated by their roots. But this is the condition of many herbaceous plants when set in borders partly filled with shrubbery. They become drawn up, lank and spindling, or one-sided, and they make a comparatively feeble growth. Yet, how could this be otherwise when the soil is exhausted by the rank-feeding bushes? And besides, there is no harmony of effect between trees & shrubs. For illustration, take an extreme case: A tree awakens the idea of dignity and grandeur. One needs to stand at some distance to examine and comprehend it. The expression of an herbaceous plant in bloom, is that of brilliancy of color, and beauty of detail, and the eye must be brought near to examine it. To enjoy trees, one must look up; to enjoy plants he must look down. The parallel holds, somewhat, between shrubs and plants. The works of the best artists are marked by unity of design; so will the works of the best gardeners be. If we want to enjoy trees and shrubs, let us have them grouped by themselves; and the same of flowers.

And here let us say, that too little attention is given to shrubs. They are beautiful in themselves, and they form an appropriate link be-

tween trees and plants. Their habits, as to height, form, color, etc., should be made a continual study, and their arrangement, in groups and scattered specimens, should be as carefully planned as that of trees. They may be set in grass-ground, if the soil is kept well stirred around them a few years, until they are firmly established; after this, the grass may be suffered to grow up to their stems. They should be set at suitable distances apart, to allow of their full growth without becoming crowded into a confused, ill-shapen mass, as in a wild scene. It was a standing rule of Mr. Loudon, that "as a garden is a work of art, and a scene of cultivation, every plant or tree should be so placed as never to be mistaken for a tree or plant placed there by accident, or so as to prevent the prac-



NEW PLANT FOR HANGING BASKETS.

(Engraved for the American Agriculturist.)

very easily cultivated in good loam with the addition of a little thoroughly rotted leaf-mold.

The rustic basket containing it, shown in the engraving, is worthy of notice. An almost endless variety of designs for such receptacles can be made of twisted pieces of grape vines, gnarled branches of oak, irregular roots of various sorts, etc. These, neatly varnished, will be more pleasing than the most costly vases.

#### Mixed Flower Gardens.

It is a great mistake to mix shrubs and herbaceous plants in the same beds. They can not thrive well together, and the one injures the effect of the other. It no doubt looks very picturesque, in a wild wood, to see trees, shrubs,



tices of good cultivation from being applied to it." This is a very good rule for the planting of shrubs and flowers, as well as of trees.

### Large Rhubarb from Seed.

Hugh Miller, of Charlevoix Co., Mich., wrote to the *Am. Agriculturist*, Oct. 11: "The Linnæus Rhubarb seed received through your Seed Distribution in the Spring, was planted in common garden soil of fair quality, and appears to have produced two or three new sorts. The largest kind is a dark green, and some of the stalks measure, at this date, 12½ inches from the ground to the leaf, and 4½ inches in circumference at the bottom. The stalk is round on the under side, and flat above. The leaf is 20½ inches long, and 21½ inches across."—This is certainly a remarkable growth from seed the same season. As we distributed many thousands of packets of seed, it is quite likely that several improved seedlings have been produced which will be worth propagating and diffusing elsewhere. The quality of the stalk, or of its juice, as well as size of growth, must be taken into account in deciding upon the merits of the new seedlings.

## THE HOUSEHOLD.

### Smart Parents have Dull Children.

The truth of this, as an almost universal rule, can be substantiated in every community. We should naturally expect the contrary. Striking characteristics are, in part at least, transmitted from parents to children. Why then, do so few sons and daughters of intelligent, active, and successful parents develop equal energy and achieve equal success?

Probably the following suggestions explain the difficulty and indicate a remedy. With rare exceptions, a man's success depends less upon his natural abilities and opportunities, than upon his self reliance, and consequent exertion of his powers. These traits are mainly developed in youth. Take an illustration. We have a friend, an equal partner in a firm doing business in one of the large marble blocks in this City. His natural intellect is not above average. Left an orphan at the age of four years, he fell into the hands of an uncle who was strict to austerity in his moral rule, but otherwise careless, and the boy was left mainly to shift for himself. To obtain pocket money, and much of his clothing, he peddled apples, gingerbread, etc., at shows, general trainings, and similar gatherings, and also made and sold various simple mechanical articles. The strict discipline of his uncle kept him out of vice, but the necessity of depending upon his own exertions, and the early practice of laying out his own plans and enjoying their results, developed ingenuity, foresight, and self-reliance. At manhood he came to New-York and entered a store as porter. His strict moral habits, and his developed abilities, were soon noted, and he was made clerk in the packing department. From this he was promoted to the selling, and then to the purchasing department, and upon the death of one of the partners, was gladly taken in as one of the firm. His business abilities, with his small savings, were considered a full equivalent to the greater money capital invested by the other partners.

Thus it has been in numberless instances. The children of the poor, thrown upon their own resources, have risen to competence and wealth. Their disadvantages have educated their abilities. But what has this to do with the subject of the present article? A good deal. Those parents who are "smart" themselves, generally do most of the work themselves, or at least take the whole direction of it. That active mother finds it easier to do her housework, than to leave it to the daughter. The daughter knows that mother will look after it, and exercises no care or oversight. The father looks

after every thing himself. The son is a mere machine worked by the father, and thus he grows up, incapable of successfully directing his own powers. Though naturally sharp, his faculties are dulled by inaction, and inherited talents are of little avail.

Our opinion is, that while parents should abate nothing of strictness of discipline in general matters, they should throw their children more upon their own resources. Let the son have his plot of ground, his animals, his own personal property, entirely under his own direction, for the care of which he shall be wholly responsible, and upon the proper management of which shall depend somewhat of his own pleasure and profit. Let the daughter at an early age have the oversight of certain departments of household labor, particularly those which relate to her own comfort. Let them thus grow up habituated to the exercise of their own thinking and planning powers, and their natural abilities will develop and give them a measure of success in adult years, which will do credit to their inherited talents.



### About Pocket Handkerchiefs.

The pocket handkerchief, though not a prominent article in the outfit of a lady or gentleman, is yet worthy of some little attention. Care, but not fastidiousness, in minor points, marks refinement in either sex. It would excite ridicule for a well-dressed lady to display an old-style cotton pocket handkerchief, blazing with red and yellow devices, such as are in great request at the South for turbans for the negroes; and all the more justly, because a neat linen article can be had at no greater cost. To make the apron, or the fingers perform the service required of a handkerchief, is an abomination not to be tolerated in decent society.

For persons afflicted with catarrh, silk handkerchiefs are preferable to linen, being softer, and less apt to chafe the skin; they are also more serviceable. Care should be taken not to keep them in use an unreasonable length of time because they do not



easily show soiled places. They collect dust and other matter offensive to cleanliness as readily as linen, even if it be not manifest to the eye.

A neatly ornamented border or marking for the handkerchief for ladies is desirable. Expensive lace edgings and exquisite needlework, costing large sums, only show a love of ostentatious display, not in accordance with good taste. Accompanying this article are several original designs for ornaments around the name, or initials of the owner, to be marked upon the corner, which will be acceptable to the ladies. These designs can easily be traced upon the linen with a fine-pointed pencil, by laying it upon the paper, and holding it against the window pane. Afterward they can be readily worked with the needle, or drawn with indelible ink.

A CHILD allowed to govern those who should restrain him in infancy, will usually grow up without

the power of self-government, and be a slave to his own passions, or the tool of designing men.

### Children on the Floor.

The floor is *always* the coldest part of a room in the first story, except in the few instances where the cellar contains an unshielded iron furnace that heats the whole air there, and the floor above.—In our own dwelling we use just such a furnace, at the expense of extra fuel, and to the detriment of vegetables and food stored in the cellar, because by this means the floors of the room above are kept warmed for the baby and the smaller children, and for the feet of all, young and old. Another cellar is used for the storage of most vegetables and fruits.—When the sun is shining into a room, stir up a little dust, and observe the currents of air. It will be seen that the warm air from the stove or register constantly rises toward the ceiling, while the cold air from the cracks and crevices about the doors and windows flows downward and along the floor. Young children, therefore, when sitting or frolicking on the floor, are in the coldest part of the room. The feet of those sitting or standing, are also the coldest. If, added to this, there is a cold cellar, or cold current of air beneath the single layer of boards in the floor, it is no wonder that the hands and feet and bodies of children get so cold, while the persons sitting or standing feel comfortable. There is perhaps no help for the currents of cold air; but when the baby is set on the floor, or the youngsters are playing there, they may be made more comfortable by spreading an extra carpet or piece of drugget, or even a blanket under them. In the morning, and whenever the fire gets low, or the floor, or the air of the room is unusually cold, the children should be elevated—the babe in the crib, and others on chairs. Every lady knows that her feet are warmer when placed on a foot stool, even if but a few inches high, than when they are upon the floor. The higher position of the head, neck, and arms, explains why these are warmer than the lower extremities, though the latter are well covered, while the former are bare. This may seem a small matter for discussion in the *Agriculturist*, but on attention to such little things much of our comfort and health often depend. At any rate, while you yourself feel warm, don't forget that the baby on the carpet is in a colder region, and may be actually suffering while you are warm.

### Boots and Shoes—Warm Feet.

Those who have half a dozen active children, more or less, to keep shod, have probably found out ere this, that leather has gone up in price almost (but not quite) as rapidly as printing paper. If any one can tell us how to get cheap shoes, or any kind of shoes that will not cost about a dollar a month for each youngster, he will confer a special favor, and we will hasten to publish the fact for the benefit of the rest of mankind. Much can be done to lessen the expense of shoe leather, even at the present prices, by judicious selection and proper care of boots and shoes. A great mistake is made in buying thin shoes, with thin soles, for girls, while boys are provided with thick-soled high boots. A pair of strong boots will last a girl longer than several pairs of thin ones, and will allow her to enjoy the air and exercise which are necessary to health. There is no reason why the feet of girls and women should be more thinly clad than those of boys and men—"Fashion kills more than the sword."

Some of the means taken to preserve leather are injurious to it, while others are injurious to the feet. It is not desirable that a boot should be thoroughly waterproof; when this is the case, the perspiration is confined, and the feet rendered uncomfortable and unhealthy. The "waterproof or varnish blacking" so frequently used, is injurious to the leather, rendering it less pliable. It confines the perspiration, and keeps the feet cold by making the leather and stocking better conductors of heat. All those preparations which claim to render leather waterproof should be discarded. The

method which we have found most satisfactory is to apply melted tallow freely to the soles of the boots and shoes, and to the upper leather about an inch high around the soles. In this way the greater part of the upper leather is left in its natural condition, and will allow the perspiration to escape through the pores, while the soles are kept pliable and waterproof. The application of hot tar, as recommended in an article going the rounds of the press, makes the sole leather stiff, and, being unyielding, it wears off in contact with stones and frozen ground more rapidly than when rendered pliable by tallow. Neat's foot oil, when accessible, is preferable to tallow. When one is walking or working in deep snow or mud, it may be necessary to apply a single coat of grease or oil over the whole upper leather. We have found from experience that ungreated boots and shoes last much longer, and are more comfortable than those made air and waterproof by oil or by impervious blacking.

"Keep the head cool and the feet warm," is a trite prescription for health. The feet are always in a colder atmosphere near the ground, as well as exposed to dampness; and, worse than all, a foolish Chinese fashion, requires them to be cramped in shoes too small to admit free circulation of the blood which is the source, or rather the conveyor of animal heat. Special care is therefore needed to keep them warm. India-rubber overshoes are very good if worn only out of doors, and removed when coming in. Sandals, open over the foot are best, except when obliged to wade in snow or mud. Nothing contributes more to health and comfort than a frequent change of stockings. When stopping exercise at the close of a day's work, we invariably remove the socks filled with perspiration through the day, and put on dry ones for our long ride home to the country. Much comfort, and greater freedom from cold has resulted from this practice. The current opinion, in some parts of the country, is, that wet socks should be dried on the feet. This is not philosophical.

### Humbog Doctors.

We are heartily tired of answering private letters inquiring about the character of this, that, and the other New-York "Doctor," whose flaming cards fill up so many columns of the papers, (often unpaid for,) and whose circulars are sent broadcast over the land. There are electrical doctors, Indian doctors, doctors of eyes, doctors of ears, doctors of "specific diseases" of the male sex and of the female sex, doctors of the feet, corn doctors, and more abundant than all others, the lung doctors. We do not advertise their cards, though frequently offered large sums to do so, and it is hardly fair that we should be called upon for so much time in investigating and replying to particular cases. Let us say, once for all, to the readers of the *American Agriculturist*, that we do not know a single one of these large advertising so-called "doctors," whom we would employ in any case ourselves, or recommend to others to do so. The half of them are not to be found at home when we hunt for them; and the other half are charlatans, who seize upon some particular ailment, and announce themselves as Specific Doctors for that disease. Their operations are carried on mainly through the mails. Some have an office or rooms, and by artful words beguile their patrons into submitting to their operations, after paying well for it. As a rule, those who make the greatest show in advertisements are the veriest quacks, without skill or ability to succeed in regular practice. Not a few of these are scapgraces, figuratively, if not literally, kicked out of the back door of medical colleges, for lack of application to study, or for other just causes. We may say more on this point, but one illustration will serve now: A family had a son who began to be a little hard of hearing. Seeing a spread-eagle advertisement of a Specific Ear Doctor, the parents opened a correspondence with him, and were by his letters, exciting their fears, and parading his own superhuman skill, induced to take the boy three hundred miles, and stay several weeks. Cer-

tain mystical applications of an electric machine were made daily for a month, and the parents and child were kept away from home at a heavy expense. After making a sufficient show to warrant him in charging \$150, the so-called doctor applied a mysterious wash, and in an hour after, the deafness was gone. The parents went home joyful, though it had cost them the savings of several years, and much disturbance of their business for the season. Why should they not rejoice, when their only son had been restored to soundness. They proclaimed the doctor's skill, gave him a glaring certificate, and induced others to follow their example. Now for the secret. The electrical applications were all a sham, used for effect upon the parents. The drums of the boys's ears had become a little thickened with wax, and incipient deafness had resulted, the same as if they had been filled with cotton. The mysterious ear-wash used in the end, was simply a little warm soap and water, which washed out the wax, and restored the hearing. Any half-skilled country physician, if applied to, could have discovered the cause, and prescribed the simple remedy. We notice by advertisements in our exchanges, that just now a large number of these quack doctors are perambulating the country, stopping a day or two at a time, now here, now there—just long enough to gather up the spare money of the credulous, nervous people, and then they are off. A few temporary stimulants, and the faith of the people in pretentious advertisements, give them a temporary credit, and then they take care to get out of reach of their victims. We caution our readers against any faith in "Electric Physicians," *et id omne genus*.

### Gizzards—Teeth—Stomachs.

Plato having defined Man to be a "biped without feathers," Diogenes threw before his pupils a plucked fowl, saying: "There is Plato's man."—Notwithstanding the fact that the *Agriculturist* has Diogenes *redivivus*, as a critic, we shall venture an improvement upon Plato's definition, thus: "Man is a biped without feathers and without a gizzard." This definition applies to man as he is constructed, though not perhaps as he ought to be. Indeed, most people seem to act upon the idea that Nature has made a mistake in not placing a gizzard at the entrance to the stomach; rather they act as if there was one really there. Let us see:

The stomach is a receptacle with soft thin membranous walls, fitted for holding and dissolving food after it is reduced to a fine pulpy state. In this organ the food, if properly prepared previously, is mixed with a fluid called gastric juice; then it passes into the duodenum, (the little stomach or enlargement of the upper intestine) where it is mixed with bile from the liver, and with the pancreatic fluid. These fluids combining with the nutritious portion change it into chyle or a milk-like fluid. As the food moves on through the 25 feet of intestines, the chyle is extracted by myriads of little tubes with mouths opening upon the inner surface of the intestine. These tubes convey the chyle into a receptacle in front of the spine, near the small of the back, whence it is carried by a larger tube and poured into the blood in a vein just below the left collar bone. The blood distributes the nutriment to all parts of the body as needed. But suppose a piece of meat, or a lump of potato, or of apple, the size of a large marrowfat pea, happens to get into the stomach. Having no crushing power, it can only roll the lump over and over, wearing and dissolving off a little from the surface, perhaps. The food heats and sours, if not dissolved, producing pains and dullness, and heartburn, and if there be much of it in this condition, sickness and vomiting, followed by a natural effort to eject the irritant. But usually, the undissolved lumps pass on after a time, and make their way through the entire intestines. As these have a peristaltic or worm-like motion, they are constantly irritated by contact with the hard substances, producing pains, colic, inflammation, resulting often in diarrhoea, or perhaps in dysentery. Every lump of food voided in an undigested condition has been a source of derangement—per-

haps not serious to a vigorous person, but still injurious. Most of the headaches result indirectly from undigested food in the stomach or intestines. But a gizzard at the entrance, with its strong hard sides and supplied with gravel stones, would mash up the lumps, and leave the stomach to go on with its natural functions; more nourishment would come from the same food; heartburn or stomach-ache and irritation of the bowels would not usually be produced. Fowls swallow their food whole, and the gizzard does the grinding.

Shouldn't man have a gizzard then? Not necessarily. Nature, in her wisdom, has given him a "gristmill" right at the entrance of the alimentary canal—sharp incisors in front to cut the food, and back of them molars or grinders to crush it as between an upper and nether millstone. Let these do their full work upon every morsel of food, mashing it to powder and half dissolving it in the saliva of the mouth, and the troubles below will cease—if only so much be swallowed as the stomach can conveniently hold and work up. If the teeth be sore or defective, cut or mash every atom of food to the smallest possible fragments, while still on the plate. This course rigidly followed will lessen the physician's bills, will aid to prevent or cure dyspepsia, will save aches and pains in the stomach, in the bowels, and in the head, and will produce far more nutriment, strength and vigor, from the same amount of food.

### CHILDREN'S EATING.

What is said above, applies with especial force to children. How often their evacuations are filled with undigested food, yet these lumps of apples, of potatoes, and other vegetables, etc., can not pass through the body without producing disturbance and pain all along the alimentary channel. No wonder they suffer so much "pain under the apron." No wonder they are so often sick, are so often puny, and that so many of them die with summer complaints. The writer's rule is this: Until children are old enough to understand the subject, or become habituated to masticate every item of food swallowed, care is taken to have their meat cut fine, the potatoes mashed on the plate, and other vegetables either cut or mashed. At breakfast and dinner they eat what others eat, if prepared as above. As they retire early, the last meal is a very light one, consisting of a small quantity of bread and milk, or mush and milk, or bread slightly buttered. Since we learned to adopt the above precaution in regard to preparation of food, and light suppers, they have scarcely been sick at all, they do not complain of pain, have had no bowel complaints, Summer or Winter, they show no signs of "starvation," but are vigorous in body and mind beyond their years; and they sleep sweetly and soundly, very seldom waking from 7 P. M. to near or after 6 A. M. Any variation from uniform good health has been traced directly to failure in carrying out our rules. We firmly believe that if these rules were generally adopted and thoroughly practised out, nine-tenths of the pain, sickness, and deaths among children would be prevented.

### How to Prepare Hominy.

R. Avery writes to the *American Agriculturist*: "As we are frequently inquired of at the table, how we treat hominy to make it so white and soft, I send you the process for publication. Take strong lye, put it over a brisk fire and when boiling, turn in sound white shelled corn as much as the lye will cover. Boil and stir briskly, until the bran is loose (from 1 to 3 minutes), hurry it into clean water and wash and rub it thoroughly, to remove all specks of bran. Soak it several hours, changing the water each hour: it will then look white and clean. As much may be hulled at a time as there is lye to cover, and after the lye is out, it can be spread and dried for use.—In boiling the hominy, par-boil for a short time, then put it in boiling water, and as you fill up, do it with boiling water. Cold water would set it and it would get no softer. Boil very moderately 8 or 10 hours without stirring, or it will burn. In preparing it for the table, put some in a frying



pan, and when warm mash with a potato masher. Season with salt and gravy or use in milk. In cold weather 19 out of 20 prefer it to the best potatoes."

### A \$150 Doll.

If the value of an article should be computed from the amount of benefit derivable from it, the following calculation, originating with some unknown author, is not far out of the way, and is well worth considering by the parents of every little girl. It is unnecessary to say that the passion for dolls with girls, as that for a whip and a knife with boys, is universal. It can be gratified almost without expense; the materials may be found in every rag-bag. But we believe a few shillings may be well expended for something more attractive than the ordinary rag-baby. Let the child have as good an imitation of a 'real live baby' as can be found, and her interest in, and care for the precious treasure will be greatly increased. Here are the figures as set down by one who has tried the experiment:

The increased attractiveness of home to the child is worth during her entire girlhood at least.....	\$25.00
The relief to the busy and often feeble mother while the child is amused with the doll.....	25.00
The cultivation of a cheerful disposition.....	25.00
The development of the best affections.....	25.00
The knowledge of dress-making, millinery, etc., gained by dressing the doll.....	25.00
The motives to faithfulness in other duties, which may be inspired by judicious management.....	25.00
Total.....	\$150.00

Who will say that a single item in the above account is too high? Neither can it be justly asserted that such trifles as dolls for children are unworthy the grave attention of the *Agriculturist*. Whatever ministers to home comfort and improvement, is matter for study; and besides, in judging of the importance of what pertains to children, we should in part look through their eyes. What little girl does not conceive this subject to be one of the very highest possible moment? A MOTHER.

### German Economy.

Some of the pleasantest pictures of rural life in Europe, are those drawn by Mr. Howitt. Particularly in Germany, does he find much to interest him. One thing which struck him quite forcibly, was the carefulness with which the country people save everything which can be turned to use. For instance, the roadside is not always set with forest trees for shade and ornament, but is planted with fruit trees, and these are protected and cultivated hardly less than those of the orchard and garden. Again, more pains are taken, than with us, in saving and drying all kinds of fruit for domestic use and for sale in market. Cows are not generally pastured in Summer, but are kept in sheds or small yards, where they are fed in various ways. Grass and clover, refuse fruits, vegetables and meal, etc., are carefully provided for this purpose. In some cases, the women and children go out with sickle and basket, to cut up and gather grass and weeds from the roadside; the boys go into the marshes and woods to gather tall grass and even to cut shrubbery, all for the useful cow. Yes, the useful cow; for not only is every drop of her milk saved and turned to account, but her other droppings are assiduously collected, and applied where most useful.

The tops of potatoes, refuse of hemp, and stalks of beans serve as bedding for the cow; and even the rough stalks of poppies, after the heads have been gathered for oil and seed, are converted into manure for the land. Children are often sent into the woods to collect baskets and bags of moss for cattle bedding, which afterward goes into manure. In the Autumn, the falling leaves by the roadside and everywhere are swept up and stacked for the same purpose. The cones of evergreens are gathered and dried for lighting fires. While the women are tending their poultry and their cows, the knitting needles keep constantly going. In short, the Germans seem to have reduced the scriptural precept to systematic practice: "Gather up the fragments, that nothing be lost." And this same frugality and industry, we are glad to see, prevails widely among the Germans who have chosen this country for their home. With such habits of living joined with virtue, they are sure to prosper.

### A Good, Cheap, and Wholesome Dish.

A writer in an Eastern exchange, says: "My family breakfasted this morning, July 20, mainly on boiled wheat. Boiled wheat and milk. Boiled wheat and maple sugar. Not wheat flour, nor wheaten groats, nor cracked wheat, but whole grains of wheat, shelled from the best heads, the larger the better, and soaked in cold water two or three hours, and then boiled in the same water one or two hours, or until quite soft, and the water all absorbed. It should all be cooked while other culinary operations are going on, as it needs to boil or simmer on a slow fire for a good while, and care must be taken at the last that it does not burn. To prevent this, it may be finished off by placing the kettle in a pan of water. How easy for our soldiers to have a change in the bread and salt meat rations, if they may be allowed to glean a few wheat heads, and boil the grains in their camp kettles. How convenient would this little item of knowledge in domestic cooking be to the wife of many a farmer who would gladly get up an extra dish for the tired harvest hands! Try it. How many families are this day living on short allowance, right alongside of a wheat field, or with grain stack or barn near the house, because they can not get it ground, the mill being dried up or broken down, or occupied by 'the army,' or suffering a collapse, so that no grinding can be had."

### Hints on Cooking.

**Housekeepers' "Recipes"—A Suggestion.**—Mrs. W. S. Miller, Dutchess Co., N. Y., suggests that in giving recipes, it is advisable to have only such materials as are found either in the house or in an ordinary country store, and that the idea of economy and health should be kept in view. [This would limit this department to a particular class.—The greater the variety the better, and then there will be something to suit all classes.]

**Good Cheap Brown Bread.**—Mrs. W. E. Thomas, of DeKalb Co., Ill., writes: ".... I would be unwilling to 'keep house' without the *American Agriculturist*. We have been following its suggestions to 'use more corn meal in our cooking,' and among the variety of recipes tried for 'Brown Bread,' the following has come into constant use: Stir thoroughly together 2 teacupfuls of corn meal; 2 of rye meal (of the 'seconds' flour of wheat); 1 of fine flour;  $\frac{3}{4}$  teacupful of molasses;  $2\frac{1}{2}$  teacups of sweet milk; 1 teacupful of salt, and 1 of soda;  $\frac{3}{4}$  teacupful of ginger. Cook by steaming  $3\frac{1}{2}$  hours steadily. It is pronounced by all, most excellent, either warm, or cold."

**Mince Pies without Brandy.**—Contributed to the *American Agriculturist*, by Maria Ray, Suffolk Co., N. Y. Take 9 lbs. of boiled beef, 2 lbs. suet, 6 lbs. raisins, 4 lbs. currants, 4 oz. cinnamon, 2 of allspice, 1 of cloves, 1 quart molasses, 7 lbs. of clean brown sugar boiled down in 2 gallons of sweet cider to half the bulk. Mix all well together and pour the boiling cider on it. Cover close until next day, when it will be fit to be made into pies. This will keep good for at least six months.

**Potato Custard.**—Contributed to the *American Agriculturist* by N. Anderson, Franklin Co., Pa.: 1 pint mashed potatoes, 2 cups sugar, 1 of butter or lard, 4 eggs, nutmeg, thin it with milk, and bake.

**Crumpets.**—Contributed to the *American Agriculturist*, by N. Anderson, Franklin Co., Pa.: 1 quart bread dough, 3 eggs, milk enough to make a batter; let it rise; bake in cakes on a griddle.

**Opening Cemented Fruit Bottles.**—Mrs. Lucy R. Tatum, New Castle Co., Del. Place the inverted bottles on a heated stove until the cement in the patty pans is melted, lift the bottles from the pans, turn them right side up, and the softened cork can easily be removed with a cork screw, or even a stout fork.

**Apple Butter.**—"J. W. M." asks some, Keystone State housekeeper to furnish the *American Agriculturist* with a recipe for making the genuine Pennsylvania Apple Butter. Here is the writer's method: Boil new cider down one half. Pare, cut, and core equal

quantities of sweet and sour apples. Put the sweet apples in a large kettle to soften a little first as they are hardest. Add enough boiled cider to cook it. After boiling half an hour, stirring often, put in the sour apples and more boiled cider with molasses enough to sweeten moderately. Boil until tender, stirring to prevent burning. Pack in firkins or stone pots for Winter use. (The molasses is not needed, we think, while it would injure the flavor for many people.—Ed.)

**Brandy in Cooking.**—Mr. W. W. Nelson, Kent Co., Del., alluding to our remarks on the use of brandy in cooking, on page 372, December *Agriculturist*, gives a case in point—many such cases have occurred. A young man was reclaimed from apparent ruin by the efforts of the temperance society, and was getting along finely, until he partook of brandy mince pies at a friend's house. This brought back his old appetite, and he is now a perfect sot. "If I can not have mince pies without brandy, I will not have them at all."

**Cleaning Pigs' Feet.**—J. W. Humphreys, Washington Co., Pa. Put the feet in cold water to soak over night. With a moderately sharp knife, scrape all parts thoroughly until the skin is clean and white. Hold the lower ends in hot water for a minute or two, to part the dew-claws and hoofs which can then be twisted off with the hand. Singe in a clear flame and they are ready to boil for souse or head-cheese.

### BOYS & GIRLS' COLUMNS.

#### The Editor with his Young Readers.

A HAPPY NEW-YEAR to you young friend! I mean you who are just now reading this line, and not some other girl or boy.—Who spoke first this time?—When I was a boy, and it begins to seem a great while ago, though not so long that I have forgotten in the least how girls and boys thought, and felt, and acted, and I still enjoy playing boy with the little ones at home, for it is about all the recreation I have in these busy times—but I was going to say, that when I was a boy in years, there was a great strife to see who should say "happy New-Year" first. Sometimes we laid awake until the clock struck twelve, and then bounded out of bed and ran to papa and mamma's room, and waked them up so as to get the start of every one else. Well, I don't see that boys and girls are much different now. They have more books and papers to read, and probably know more of the world at the same age, but they have boys' and girls' feelings just as we had many years ago, and just as boys and girls did a hundred, and a thousand, and five thousand years ago, I don't believe there were ever more than two persons, who did not have nearly the same feelings, hopes, anxieties, love of sport and pastime, that you have. (Who were these two persons, and why did they have no childish sports?)—But I was speaking of the haste to wish the "Happy New-Year," first. Do you never, in this haste, forget what the words mean? If you really desire papa and mamma to have the happy year you wish them, how much will you do, to make it so to them? Will you do anything? Suppose you begin just now, to see how much happiness you can give them for one whole day. Will you? [I was going to tell some of the ways in which boys and girls may make their parents happy, but I see John and Mary have skipped over the rest of this, and have gone to the puzzles and stories. So I will stop here simply expressing the hope that they will soon come back and in their own hearts, answer the above questions.]

**A CHILD'S DEFINITION.**—A little Sunday school scholar, when asked to define *Chaos*, answered, that it was "a great pile of nothing, and nowhere to put it."—Another when asked to define *slander*, said it was "when nobody did nothing, and somebody went and told on't."

A little girl of three years, who was born away beyond the Mississippi, where no orchards were as yet planted, was brought on a visit to Ohio, where she saw an apple tree in full bloom, covered with a profusion of white blossoms—a most beautiful sight by the way. Lifting her fat little hands in an attitude of devotion, she exclaimed: "See God's great big bouquet."

A little boy whose mother had promised him a present, was saying his prayers preparatory to going to bed, but his mind was running on a horse, and he began as follows: "Our Father who art in Heaven—ma, wont you give me a horse—thy kingdom come—with a string to it?"

To rise early requires quickness of decision; it is one of those subjects that admit of no turning over.

A little girl, while rumaging a bureau-drawer, found her grandfather's eye glasses, and at once cried out: "Oh, mamma, ganpa has gone up to hebbin widout his specs."



"IT'S COLD."

Do you smile at the plight of this poor urchin? Is there any fun in having such cold fingers, and ears nearly frozen? The boy thinks not; he is crying with cold. "The great lubber!" exclaim the sturdy boys who have just come in from skating or riding down hill, with cheeks glowing, and eyes flashing, and the blood dancing merrily through their veins, clear to their fingers' ends. "Cry for the cold! when a fellow has such fat cushions on his cheeks, and a stout pair of legs to run with; that is too ridiculous, he ought to be laughed at," say you. True enough. If he were doing his best in fighting the storm, pushing boldly ahead, and were then unable to keep from suffering, we should pity him. He would deserve pity. It is pretty easy to foresee what kind of a man such a boy will make. If he has not pluck enough to bear up bravely against a wintry day, he will make but poor headway in the fiercer battles of life, when he must meet cares, trials, and disappointments. Usually those are least deserving pity who seek it most. The boy or the man who struggles on with a stout heart, no matter what difficulties beset him, will always command sympathy and respect; half of life's battles are won by going straight into the strife with a bold front. Command of one's own powers is in itself alone a great victory.

#### A Brave Boy and a Narrow Escape.

One day while the writer was in a steamboat crossing the ferry from New-York to Brooklyn, the pilot rang the bell for the engine to stop. On looking out to see the cause, there appeared a small sail-boat, just ahead, managed by a single boy, apparently not more than fourteen or fifteen years old. The tide was running strongly, and the headway of the boat could not be immediately stopped, nor could the little fellow quickly change his course, and it appeared almost impossible to prevent a collision and the sinking of the small boat. Did the boy lose his wits from fright, whimper and cry, and give up all for lost? Not a bit of it. Standing erect at the helm and doing his best to guide his boat, he sang out to the pilot of the steamboat "clear the track, or I'll run you down!" Such was the dauntless spirit of the little fellow, that the passengers cheered him loudly, and more than a dozen stood ready to plunge in to his aid, had his craft been overset. Fortunately this did not happen, though he escaped by only a few feet, and passed safely on, leaving all who had witnessed the occurrence in enthusiastic admiration of his presence of mind and intrepidity.

#### Girls Skating—Hints to Beginners.

A few years since any girl venturing to appear on skates, would have been called a "tom-boy" and frowned upon by her sex generally. But, for once at least, fashion has introduced a sensible change, and girls may enjoy this healthful and exhilarating exercise. The writer has had the pleasure of accompanying and assisting many young ladies in their first attempts at the art, and has seen the

good effects of proper indulgence in the sport. It has brought roses to many pale cheeks, strengthened weak nerves, sharpened poor appetites, and given new vigor for school and for household labors. Written instructions for learning to skate are worth little. *Go upon the ice and try*, is the only rule by which to acquire the art. It is very well to lean on the arm of a friend, during the first few attempts, but the sooner you trust your own powers, the quicker you will become a good skater. A few suggestions for choosing a pair of skates may be of service. For beginners, the runner of the skate should be about a quarter of an inch thick and slightly grooved, with the bottom nearly or quite straight from the heel to the upward curve at the toe. "Rockers," or skates having the bottom curved from heel to toe, are excellent for skillful performers on the ice, but a novice using them is likely to do most of his skating with his feet in the air. Never buy a skate with a long fanciful curve in front; though they are ornamental, many serious accidents have been caused by the ends of such runners catching in some obstruction. The straps should be stout, and so arranged as to hold the skate very firmly to the foot. The wider the strap the better, as it will be less likely to hurt the foot.

We have seen skates arranged to be fastened by screws to the sole of the shoe without the use of straps, but they did not appear to be held with sufficient firmness for good skating. Keep the ends of the straps well tucked away where they will not slip and get under the runner and thus give you a fall. See that the wood of the skate is strong, without cracks and checks, and that the runner is well fastened to it. Wear well-fitting but not tight shoes or boots of stout leather, and thick woolen stockings.

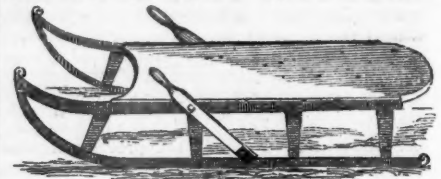


When warm with the exercise, do not stand still to 'cool off,' but move about more slowly, and after skating, always walk briskly home, to keep up active circulation of the blood, and prevent taking cold. Stiffness of muscles and lameness after skating may be prevented by thoroughly rubbing the limbs with a coarse towel or the hand, and putting on dry clothing if the garments are damp with perspiration. This should be done in a warm room, to avoid a chill. Do not make a business of this or any other recreation, sport, however innocent, to the neglect of home or school duties, but use it as a rest from them and a preparation for their more successful performance.

#### How to Save Your Shoe Leather.

Riding down hill on a sleigh is a fine winter sport. It makes the writer feel young again to think of the splendid times he used to have at it, when a boy. But he well remembers also that the fun was terribly destructive of shoe-leather. It was necessary to use the feet for rudders, and even stout cow-hide boots were soon whipped out at the toes. In the engraving below is shown an easily made apparatus for steering a sled, by which the feet are left at liberty, and the waste of leather prevented.

It is simply two stout oaken sticks shod with iron at the lower end, bolted one on each side of the sled. The hole for the bolt should be large enough to allow the sticks to move freely. By pulling on the upper end of the stick



the lower part is brought against the snow or ice, and acts as a rudder to turn the sled toward the side on which the stick is used. This will guide the sled more certainly than the heel or toe of the foot, and enable the rider to sit in an easier position, in addition to saving the shoes

#### The Statesman and the Horse.

Edmund Burke, one of England's greatest Statesmen, retired from London to spend his last days on his farm. While there, a report was started that he had gone crazy, that he went round his premises kissing the horses and cows. A friend immediately visited him to learn whether the report were true. He soon found that Mr. Burke had lost none of his mental faculties, and in a private interview with Mrs. Burke, he learned how the rumor of his insanity had been started.

Mr. Burke's only child, a young man of rare promise, had died a little while before, leaving behind him a favorite old horse. This animal, so endeared to him by association with his son, was turned into the field by Mr. Burke, with directions to all the servants that he should be treated as a privileged favorite. One day as he was taking his morning walk, the great man saw the animal at a distance, and noticed that he was recognized by him. The horse drew nearer and nearer to Mr. Burke, stopped, eyed him with a most pleading look of recognition which said as plainly as words could have done, "I have lost him too," and then the poor dumb beast deliberately laid his head upon Mr. Burke's bosom! Struck by the singularity of the occurrence, moved by the recollection of his son for whom he had never ceased to mourn, and overwhelmed with the tenderness of the animal, the illustrious Statesman clasped his arms around the neck of his son's favorite animal, lifted up that voice that had filled the House of Parliament with the noblest strains of eloquence, and wept aloud. It was not weakness of mind, but strength of affection, that bowed the man who had through life stood unmoved amid the fiercest storms of political strife.

LEARNED IT TOO LATE.—"Buy one of these superior razor strops Sir, and I will tell you a secret worth double the cost for only twenty-five cents." "I'll take one," said a bystander. Mr. Smith handed him a strop and a box of paste, and went on selling. "Look here," interrupted the purchaser, "you promised to tell me something worth double the price." "Ah, so I did," said Smith, "and it is this. If you had bought a box of the paste for five cents and put it on to your old strop, it would have made it just exactly as good as a new one."

EDITOR'S NOTES.—Being much occupied with business, I have left one of my associates to prepare this page, and must put in a word or two here, by way of query. First.—Is not that a poor boy in the picture, without clothes enough, or mittens, to keep him warm, and therefore to be pitied? Second.—Was that boy in the boat *brave* or *reckless*? Third.—Are there not other out-door sports quite as healthful, and appropriate for girls as skating? We do not say there *are*, for by all means girls should skate rather than grow puny in a hot room.—The skating and sliding down hill we can not write about from experience. Like thousands of our young readers at the West, we lived in a new, nearly level country without hills or ice ponds, and there were too many "chores" for us boys, out of school hours, to admit of skating or coasting. The work did not hurt us, but we are glad to see the boys and girls play—if they do not shirk all the work off upon their already overtaken parents.—O. J.]

The person who received an injury from an accidental discharge of his duty, is in a fair way to recover again.



### A Boy that will Never be a Man.

In New-York, as elsewhere, it is becoming quite customary to send home articles purchased at the stores; some "stuck up" people have even ordered a spool of thread sent home. Happening into a book store this morning, we saw a lady purchasing some books for her son who was with her—for Christmas presents probably. When put up they made a package about ten inches long, five inches high, and six wide. She ordered them sent to her residence about 3½ miles up town. The bookseller said to her boy: "Can't you take them up in the cars with you, my man? My porter is sick to-day, and it is quite inconvenient for me to send them so far home." "No! I don't carry bundles for a living."—We pitied that boy from our heart, and could not but feel that his mother was spoiling him by indulging him in such notions. Here was a boy 13 or 14 years old, who could not, or rather would not, carry a bundle of books for himself, that was not at all bulky, and weighed, perhaps, only five or six pounds. He was above "carrying bundles"—rather he was below it. He had not dignity or independence enough to be seen with a bundle, though it was for himself. He probably does not read the *American Agriculturist*, and so we can not speak to him directly, but to other boys we say, that if that boy lives to be forty years old, he will never be a man, in the true sense of that word. His parents may leave him money enough to keep him along awhile, but he will never earn or save much. He is coming up with habits that will unfit him for the real work which all successful men must go through with, no matter what their calling or business.—Two good illustrations are given in the life of Girard of Philadelphia, who rose from poverty to great wealth. While in a provision store, a man came in and bought a fish. Instead of carrying the fish himself, he offered a clerk a shilling to hire some one to carry the fish a few blocks. Girard at once offered to do it, and actually went by his side, carrying the fish, and received the shilling. You may guess the man's surprise when he afterwards learned who had carried his fish. Girard owned the entire block in which this man hired a dwelling.—At another time, two young men commenced the sail making business. They bought a lot of canvas from Girard, on credit, a friend having agreed to endorse their note. They each took up a roll to carry off, when Girard remarked: "Had you not better get a cart?" "Oh, no," they responded. "It is not far, and we can carry it ourselves."—"All right," said Girard, "but you may tell your friend he need not trouble himself to endorse your note. It's good enough without!" He well knew that men not above their business, not ashamed to do any honorable act, were the very men to succeed.

**Answers to Puzzles and Problems** in December No. (page 373). **Rebus.** No. 20. Key pup cur age t hoe awl bed ark: or by dividing the words a little differently, Keep up courage though all be dark.

**Arithmetical Problem.** No. 22.—Paper money is at 24 6-33 per cent discount, reckoning gold coin at par.

**Arithmetical Problem.**—No. 23.—A. should have 80 cents, B., 20 cents of the dollar paid by C. for his share.

**Riddle.**—No. 21.—The engraving below is the answer to the riddle given last month, which reads: "A four handed rider, on a two legged steed, Whipped up the feathers and made very good speed."



No. 19.—Correctly answered by "R. G. F.", L. Lawrence Fisher, C. A. Veatch. No. 20, by George M. Kelly, "Random," Oren Stone, Mary Esther Parkin, Frank B. Conger, T. B. Cunningham, Jao. D. Talbot (and 21),

Wm. H. Tracy (and 23), Melissa Church, Jarvis H. Arnold, Walter E. Talmage, Lizzie Melcher, Arthur Gilbert, A. Martin. Rufus W. Weeks answers all. Isaac T. McLain, 22, 23; "C. C. C." 21; J. G. Bunnell, 22, 23, Cornelius Hoagland, Jr. 23; Frederic A. Fill, 23; A. G. I. C. White, 20, 22, 23; E. M. Swan, 20; B. F. Nye, 22.

### New Puzzles to be Answered.



Fig. 1.



Fig. 2.

No. 24 and No. 25. **Two Picture Puzzles to be guessed.** How does Fig. 1 represent an economical man? How does Fig. 2 represent an enterprising business firm; and can you tell how it also represents a fortress?

#### No. 26—Riddle.

I have no head, yet from my lips  
Fall words of wondrous weight;  
I mark the course of mighty ships,  
And guide affairs of state.  
Darkness pursues my winding track,  
Yet nothing gives more light:  
You'll find me when you answer back,  
If this you read aright.



No. 27. **New Rebus** containing a truthful sentiment. This is one of the most difficult puzzles of the kind we have published, and it will require no little perseverance to find the correct answer.

### To Sunday-School Teachers and Others.

The new Question Book referred to last month, is now issued, and is even better than we expected. The binding is superior to what was intended at first, the covers being stiff, and in the usual style of binding such books, instead of in simple paper covers, as first announced. (This increases the postage to 4 cents, as it weighs over 3 oz.) After the sheets were struck off, we concluded to issue an edition at the Office of the *American Agriculturist*, where it will be supplied to all desiring it, by the single copy or by the hundred, at the uniform price of 10 cents, or 14 cents by mail—which, at the present price of paper, will hardly pay expenses. A hundred put up to go by Express or otherwise, will weigh about 20 lbs. The book is thoroughly evangelical, but not at all sectarian. It is simple, yet comprehensive; 52 lessons, including the leading events in Christ's life, and in the introduction of the Gospel afterward, are arranged in the order of time. Each lesson is completed on two pages opening together. The scripture text of the lesson is printed in full, with the probable time and place of occurrence. A condensed history of the events between each two consecutive lessons is given, so that by reading the lessons, and the connecting history, one gets an outline of all the events of the Gospels and the Acts, in order of occurrence. Simple questions directly upon the lesson are given in larger type. With these are a considerable number of other interesting and instructive questions, having the answer printed in full, or more frequently with the answer indicated by reference to a passage of scripture which gives a full explanation. Many interesting items of information, not accessible to the common reader, are given, as will be seen on looking over the questions. The book is specially valuable to the great mass of teachers who have not access to commentaries and other helps. The pronunciation of the more difficult proper names, is indicated by an accent mark. We are perhaps the more partial to the book, as it is the carrying out of a plan of systematic lessons we have long been aiming at; the ex-

ecution of the plan was intrusted to abler hands. Mr. Beach, Editor of the *N. Y. Sun*, a life long friend of Sunday Schools and for years Superintendent of one of the largest, and best schools in the country, who chanced to fall in with one of the first copies, said in the *Daily Sun* of December 16:

"The Sunday Schools of the whole country have suffered from the want of a question book suited to their requirements, more than from any other single cause. Every thinking person has remarked it, and hundreds of authors have made vain efforts to fill the need. In the little book before us, the practical work of a practical man, practically engaged in the Sunday School work, we for the first time discover something really valuable. It epitomizes the whole New Testament history in chronological order, and is both text and commentary, teaching the teacher and helping the scholar. That it will be widely adopted in Sunday Schools we do not question."

### The Two Caterpillars.

"Patches and patches, I'm sick of patches!" exclaimed George Rider, as he sat watching his mother, who was repairing the knees of his old pantaloons.

"Mother," he continued, suddenly, as a new idea started, "why did God make us poor? I'm as good as Joe Berry, but his father's rich, and he don't have to wear patched clothes. And you ought to see what nice things he has for dinner every day—pies, and cakes, and candy—and he's just as stingy as he can be."

"Poor soul!" said his mother, in a way that made George open his eyes wide.

"Why, mother, what do you mean?"

"I was thinking about two caterpillars," she replied.

"What a funny mother you are!" said George; "what in the world have caterpillars got to do with Joe Berry?"

"I'll tell you the story, my son," said Mrs. Rider, "and you may then answer your own question."

"Two caterpillars lived in a large garden; they looked very much alike, only one was covered with brown hair, and had black rings around his body, and the other had black hair all over, without any rings. The brown caterpillar lived on a large cabbage. It was a real palace for him. There were the large spreading leaves, over which he walked with as much satisfaction as ever a lord surveyed his extensive parks. He had fine rooms among the openings of the leaves, where he could curl himself up for a nap, snugly sheltered from rain and dew. Right at the top of the cabbage was his dining-hall, filled with the tenderest, choicest morsels of crisp leaves, which caterpillars love so well. Oh! he was very rich, and had everything a caterpillar could wish for. The little ants that climbed up to his palace, and the humble insects that picked up their living along the lanes and streets of the leaves, all looked up to him with awe, and saluted him very humbly as he walked about his wide domain."

"The black caterpillar had his home on a humble burdock that grew in a corner not far from the great cabbage. It was only a small plant, for if it had spread itself like the cabbage, the gardener would have quickly rooted it out. This poor fellow had to work hard for his living, and often to go hungry, for there were but few tender sprouts for him to nip, and he had to roam about and pick up here and there a bite as he could find it."

"But why didn't he go to the big cabbage?" asked George, who was becoming much interested.

"He would have done so," said his mother, "but the gardener had placed a bright piece of tin around the stem of the plant to keep off the worms, not knowing that one had already taken up his quarters there. The tin was so smooth that, though the poor caterpillar walked round and round it, he could not crawl half his length upward, before back he would fall in the dust."

"One day, while he was looking wishfully up to the luscious leaves above him, his rich neighbor happened to peep over the edge, and the poor caterpillar eagerly exclaimed: 'Brother!'

"'Brother, indeed!' muttered the other, proudly curling himself, so as to display his rings; 'you've made a mistake, I'm thinking.'

"'I'm thinking so too,' replied the poor caterpillar. He had intended to ask his neighbor to nip off a leaf from the cabbage and drop it down to him, but he saw it was of no use, so he crawled sadly back to his humble quarters on the burdock, and continued to grub for his living."

"The Summer passed on; the brown lordling revelled at his full table until he grew as fat as a prize-pig, but the heart of the cabbage was spoiled by his greedy tooth. The humble black laborer worked so faithfully at his burdock that it grew but little, and so the garden was kept free from its seeds, which would otherwise have ripened and scattered."

"And now the Summer was nearly ended, and the caterpillars knew they must prepare for the winter's cold."

"They therefore each left off eating, as is the custom of such creatures, and sought a secure place where they could rest in safety. The brown caterpillar climbed a tree at some distance from the garden, and upon for him-

self a magnificent hammock, which he hung from a stout branch. He was so fat that he had plenty of materials and he made his resting-place of three-fold thickness.

"His poor neighbor sought the shelter of a neighboring currant bush, and from his scanty store of silk wove a plain nest that would just hold his emaciated body. And so they both slept through the long winter.

"When the time was come, the Master of Life sent forth his angels to waken the earth. And they poured out the golden music of light until it filled the deepest woods, and the flowers lifted their heads, and the air trembled with the hum of glad insects. The humble tenant of the lowly bush heard the joyous sound, and struggled forth from his hiding-place; how changed! He was clothed in purple and gold, and a shining crown was upon his head, and while he yet wondered, a bright troop of winged beings called him to mount to the upper air, and spreading his new-found wings, he soared away to bask in the full noontide.

"But alas for the poor, rich caterpillar! His silken robes held him fast; he could not break the strong bonds he had woven for himself, and there he must be a prisoner forever. And now would my boy be rich?"

"Yes, mother," said George, softly, "when God's spring-time comes."

### Grammar Out West.

A Kansas correspondent "T. H.," writes to the *American Agriculturist*. "Will you please point out the incorrectness of the following sentences, which are almost universally in use at the West. 'Please pass me those molasses.' 'Them's good molasses.' 'Did you make any molasses?' 'Yes, a few.' 'Have you got any molasses (to a storekeeper)?' 'Yes.' 'I want to see them.' The above phrases are so common and contagious that many of the Yankees have adopted the error. How is it with oats? In Chester Co., Penn., it is classed with wheat, corn, rye, etc., in the singular number; here it is used in the plural, with beans, peas, potatoes, and other things ending with s."—The error in the sentences, as our young grammarians will see, consists in using "molasses" as a plural noun. "That molasses," "some molasses," "I want to see it," would be the correct way of using the above examples. The word "oats" is a plural noun. The Chester Co. custom of making it singular, is incorrect. Wheat, corn, and rye, have only the singular form

### Barnum Nearly Humbugged.

When Barnum was about to erect a new building on the site of "Iranistan," his former house, which had been destroyed by fire, he was desirous of giving it a new and classic name. A friend to whom he applied, suggested the compound Greek word "Neos-kome," which he translated as "New-home." The word had a pleasant sound; Barnum liked it, and was about having it engraved on stone to occupy a conspicuous place in the building; but having so often humbugged others, he was naturally a little suspicious of attempts to humbug himself. He therefore consulted one of the knowing editors of the *American Agriculturist*, as to the meaning of the word "Neoskome." He was informed that it was derived from "Neos," new, and "skome," a joke or jest, the nearest word to humbug which the Greeks possessed. Barnum concluded not to adopt that name.

DEAN SWIFT, in traveling, once called at a house. The lady of the mansion, rejoiced to have so great a guest, with much eagerness and flattery asked him what he would have for dinner. "Will you have an apple pie, or a gooseberry pie, sir, or a cherry pie, or a plum pie, or a pigeon pie, sir?"—"Any pie, madam, but a magpie," replied the Dean, in his usual dry sarcastic manner.

HADN'T HIS SHARE.—"Mr. Brown," said an assessor the other day, "how many cows do you own?"

"Why do you ask?" was the query.

"Because I wish to levy on them," was the rejoinder.

"Well, let me see," said Mr. B. abstractedly, "how many cows does the law allow me?"

"Two," replied the constable.

"Two?" said Mr. B. with good-natured astonishment; "well, if the law allows me two, I wish it would make haste and send the other along as I haven't but one."

"I can not conceive, my dear, what's the matter with my watch; I think it must want cleaning," exclaimed an indulgent husband to his better half, the other day.—"No, pa," said his petted little daughter, "I know it don't want cleaning, because baby and I washed it in the basin, ever so long, this morning."

She who marries a man simply for a "good match," must not be surprised if he turn out a "Lucifer."

Muggins, seeing a dead dog in the ditch, stopped, and after gazing intently, said to his companion: "Another shipwreck."—"Where?"—"There lies a bark that is lost forever."—His companion growled and navigated on.

## PREMIUM LIST,

### For 1863---Volume XXII.

Good Pay to Voluntary Agents who attend to Collecting and forwarding Clubs of Subscribers to the *American Agriculturist*.

(Premiums open to all who desire them.)

N. B.—Persons interested in the following Premiums, will please note them carefully this month, as they will not probably be published again in full. They will continue open, however, until further notice—perhaps through the year, but the continued rise in printing paper may compel us to withdraw the offers after a time.

Every subscriber is invited to renew his own subscription, and to solicit others to subscribe. But to all those who will take the trouble to collect and forward clubs of subscribers, we offer a remuneration in the form of first-rate articles, as named below. (The pay thus offered is much larger than we could give in cash, as we get these articles on extra good terms when for premiums.)

WE WISH IT DISTINCTLY UNDERSTOOD that these premiums are offered in good faith—no cheap, trashy, imperfect, poorly made, or second-hand thing, will be sent out, but each article offered, is the best of its kind, and every one will be selected by the publisher from the very best manufactured. They will be the best sold in the market at the prices named.

WE MAKE NO DISTINCTION between new and old subscribers in giving these premiums, but it is expected that every canvasser will not only gather up the names of old subscribers, but also secure a large number of new names.

EVERY PERSON collecting names for premiums, should send two copies of each list of names—one of them marked "For Premiums," and also with the name of the sender.

EVERY PERSON collecting names for premiums, should send the names with the money as fast as obtained, so that the subscribers may begin to receive their papers; Two copies of each list of names should be sent—one of them marked at the top "For Premiums," and also with the name of the sender. The premium will be paid as soon as any club is made up—if duplicate lists are sent.

ANY PERSON who has commenced sending in names at 30c. and finally fails to get the higher number of names, can fall back upon the smaller number, by remitting the 20 cents extra on each of the smaller number of names required.

CLUBS need not be all confined to one Post Office.

#### Table of Premiums for 1863.

Names of Premium Articles.		Price of Premiums.	Names at 30c. each.	Names at 50c. each.
1—Good Books—See terms below.....				
2—Best Family Clothes Wringer.....		\$7 50	18	37
3—Nonparell Washing Machine.....		\$16 00	35	75
4—Sewing Machine, (Wheeler & Wilson).....		\$45 00	90	150
5—Sewing Machine, (Wilcox & Gibbs).....		\$35 00	69	98
6—Aneroid Barometer.....		\$7 50	19	44
7—The Aquarius.....		\$10 00	22	47
8—Five Octave Melodeon (best).....		\$75 00	125	237
9—4½ Octave Melodeon (best).....		\$45 00	90	150
10—Four Octave Melodeon (best).....		\$45 00	90	150
11—Worcester's Unabridged Dictionary.....		\$7 50	23	48
12—Six back Volumes <i>Agriculturist</i> .....		\$6 72	19	35
13—Five do do do do.....		\$5 60	16	30
14—Four do do do do.....		\$4 48	13	26
15—Three do do do do.....		\$3 36	10	20
16—Two do do do do.....		\$2 24	7	15
17—One do do do do.....		\$1 12	4	10
18—Jacob's Portfolio Paper File.....		\$1 25	..	11
19—Windor & Newton's Paints.....		\$2 50	..	20
20—Osborn & Hodgkinson's Paints.....		\$1 25	..	15
21—Premium Cylinder Plow.....		\$10 00	20	65
22—Eagle Plow No. 20.....		\$9 25	28	62
23—Hay and Straw Cutter (best).....		\$8 00	26	58
24—Steel-tooth Cultivator (best).....		\$7 00	24	55
25—Family Lard and Wine Press.....		\$7 00	24	55

#### DESCRIPTION OF THE PREMIUMS.

##### Premium No. 1—Good Books.

Any person sending 16 or more subscribers, may select from our book list, (page 576,) to the amount of 12½ cents for each name, at the club price of 30 cents, or to the amount of 85½ cents for each name, at \$1 each. Farmers' Clubs have frequently joined together and obtained a good library through these premiums. N. B.—The books will be delivered to the recipients, (by mail or express,) free of all cost. See about prices of Books in Basket Note.

##### No. 2—Family Clothes-Wringer.

This is a first-rate household implement—a great saver of garments, and of hard work. With this machine set on the edge of the wash-tub, the garments are easily and rapidly passed between two India-rubber rollers, the water falling back into the tub, and the garments dropping into a basket, in a drier condition than they can be wrung by hand, and therefore more quickly dried on the line. A child can in a few minutes wring out a tubful of clothes. We have had one in constant use in our family for nearly three years, and it is still as good as new. The machine offered, No. 2, is just the thing for family use. It is provided with cogs to move the rollers together, so that it is not possible to tear garments, as is the case with cheaper Wringers not provided with cogs. We present one of these No. 2 Wringers to any person procuring and forwarding 18 subscribers, at \$1 each, or 37 at the lowest club price, (30 cents each.)

##### Premium No. 3—Washing Machine.

The Nonparell Washing Machine we have had in use in our family for nearly a year past, and it has not only driven out half-a-dozen placed there on trial, but has really given excellent satisfaction. It is the only machine, out of twenty we have tried, which the "help" cheerfully use without compulsion. It is a labor-saver and a clothes-saver—two important considerations. (See descriptive cut, and advertisement on page 31.) The clothes are put in, in quantity, and quickly washed by simply turning a crank. The balance-wheel adjusts the force required, so as to make the turning easy. Take it all in all, it is the best Washing Machine we know of, and is worthy of a place in every family. They are of three sizes; we select No. 2, as the best size for common family use. The price of No. 2 is \$16. This machine we will present to any one forwarding 35 subscribers at the regular price, (\$1 each), or 75 subscribers at the lowest club price, (30 cents.) The machine can be sent to any point as freight, or by express, and will be forwarded, free of all expense, except the freight after leaving the city.

##### Premium No. 4—Sewing Machine.

90 Subscribers at \$1 each, (or 130 at 80 cents each,) will entitle the person sending them to Wheeler & Wilson's best \$45 Sewing Machine, (including Hemmer), new from the factory, and of the very best make. There is no better family machine than this made, as we have proved by nearly five years' use in our own family, in connection with other machines. We want no better. The terms on which it is offered above, will enable many families to secure one without direct outlay of money. The Premium Machines will be selected new at the manufactory, and will be forwarded, well boxed, with full directions for setting up and using, and with no expense, except for freight.

##### Premium No. 5—Sewing Machine.

69 Subscribers at \$1 each, (or 98 at 80 cents each,) will entitle the person procuring them to Wilcox & Gibbs' \$35 Sewing Machine, including a set of Hemmers. This is the best machine of its kind, (sewing with one thread,) and has several points superior to other machines. It is neat, well made, simple in its operation; and having tested one in our own family for more than two years, we think highly of it, and can recommend it to those who can not afford to buy the higher priced double-thread machines. Some of our neighbors think this machine ahead of all others. Premium 5 will be selected and sent the same as No. 4.

##### Premium No. 6—Barometer.

19 Subscribers at \$1 each, (or 44 at 80 cents each,) will entitle the person getting up the club to one of Kendall's Aneroid Barometers, (Price \$7 50.) This is a good, portable instrument, and valuable to every person as a weather guide, as well as for scientific purposes. See page 377, December No. It will save to the farmer and others many times its cost, as a weather-indicator. These instruments resemble a large watch, 5 inches in diameter, and 2 inches thick. Each one is in a neat leather case, and when sent to a distance, this is packed in cotton, in a wooden box 4½ by 8 inches, and can go anywhere, by express or otherwise, with perfect safety.

##### Premium No. 7—The Aquarius.

This is a capital instrument, valuable to have in every house. It is a portable hand force-pump, which any one can catch up at a moment's warning, and throw from a pail or other vessel a steady stream of water upon a fire in a house, or elsewhere. It is supplied with both a jet-pipe and a rose, or sprinkler, and can be used for washing windows, carriages, &c.; for sprinkling trees, plants, destroying insects, &c., &c. With it, it is easy to wash the second and third story windows, and to sprinkle water upon the roofs, while standing upon the ground. Such an apparatus will often enable a person to so use a bucket or two of water as to extinguish a fire breaking out where it could not be reached with water dashed on from pails. It is supplied with suction and injection India-rubber pipes, and with air-chambers to keep up a constant stream. The weight is 8 lbs., and it can be sent anywhere as freight, or by express. (Price \$10.) We will present an Aquarius complete to any one sending us 22 subscribers at \$1 each, (or 47 at 80 cents each.)

##### Premium No. 8—Melodeon.

125 Subscribers at \$1 each, (or 237 at 80 cents each,) will entitle the person getting up the club to one of Geo. A. Prince & Co.'s \$75 Melodeons (5 octaves). These Melodeons are of very superior tone and finish. We have ourselves used one for three years past, and it has given the highest satisfaction, and is pronounced by all who have heard it, as one of the very best. The different priced instruments are of equally good tone—the price varying with the size and style of finish. The size, price, etc., of these instruments can be learned particularly, by sending a stamp to Geo. A. Prince & Co., Buffalo, N. Y., for an illustrated descriptive catalogue. The instruments given as Premiums, will be sent new directly from the factory at Buffalo, ready boxed, and without expense to the recipient, except for freight. Schools and churches can readily combine their efforts and secure one of these instruments. This has been frequently done. See "N. B.," under Premium No. 10.

N. B.—Any higher or lower priced Melodeons will be given for other lists, in the same proportion. See table above.

##### Premium No. 12—Best Dictionary.

23 Subscribers at \$1 each, (or 48 at 80 cts. each,) will entitle the person getting up the club to a copy of the large Pictorial Unabridged Edition of Worcester's Dictionary, (Price \$7 50.) This now stands confessedly the most valuable Standard Dictionary published. It weighs nearly 10 lbs.; is 12 inches long, 10 inches wide, nearly 4 inches thick, and contains 1854 pages of 3 columns each, giving the spelling and pronunciation, with full explanations, of every word in the English Language, and as a source of general information on all subjects, stands next to the Cyclopaedia. The Dictionary can be called for at our Office, or sent by Express or otherwise, to any part of the country.



### Premiums Nos. 13 to 18—Back Volumes—A First-rate Library.

These premiums (13 to 18), will enable any one to secure the previous excellent volumes of the *American Agriculturist*, as far back as Volume XVI. These will be sent post-paid, in clean, new numbers, each volume by itself, with index. The whole five can be taken together, or one or more copies of any particular volume be selected, as desired. They will be presented as in the table above, viz: For 20 Subscribers at \$1 each, (or 35 at 80 cents each,) we will present six volumes. For 16 Subscribers at \$1 each, (or 30 at 80 cents each,) we will present five volumes. For 13 Subscribers at \$1 each, (or 25 at 80 cents each,) four volumes. For 10 Subscribers at \$1 each, (or 20 at 80 cents each,) three volumes. For 15 Subscribers at 80 cents each, two volumes. For 10 Subscribers at 80 cents each, one volume. Let every one be careful to name just which back volumes are desired.

### Premium No. 19—Best File for Agriculturist.

**Jacobs' Portfolio File**, made just to fit the *Agriculturist*—the name gilded on. This is a leather cover or portfolio, so arranged that successive numbers of the paper can be inserted in a minute, and be properly preserved in book form for reading. When one volume is completed, the sheets can be removed and stitched, and a new volume inserted. A single cover will answer for a dozen successive volumes. It is the most complete file yet made. The price is \$1, and the postage 25 cents. We will forward it, post-paid, to any one sending eleven subscribers, at the lowest club price, (80 cents each.)

### Premium No. 20—Paints.

20 Subscribers at 80 cents each, will entitle the person getting up the club to an assortment of *Winsor & Newton's Water Color Paints*—consisting of 12 colors, put up in a neat mahogany case, with brushes, etc. These Paints are imported from London, and are by all considered the best in the world. They are adapted to the finest work, or they will make a neat and appropriate present to any of our younger readers. They will be sent post-paid any where in the United States within 3000 miles.

### Premium No. 21—Paints.

15 Subscribers at 80 cents each, will entitle the person getting up the club to an Assortment of *Osborne & Hodgkinson's Water Color Paints*, consisting of 24 colors or shades, put up in a neat case with brushes, cups, etc. These are of American manufacture, and though not so fine as the above, will answer for ordinary practice by children or beginners, and for common sketching. Sent same as No. 20.

### Premiums Nos. 22 to 26.

We have not space left to describe these particularly, this month. The Cylinder Plow was described in this journal last year. It is undoubtedly a great improvement. The Eagle Plow is well known, and so is the Hay and Straw Cutter, and the Steel-toothed Cultivator, one of the most useful implements on the farm. The Lard and Wine Press is a very convenient household implement, for pressing out lard or tallow, the juice of grapes, currants, berries, &c. For the prices, and subscribers required, see the table above.

### Market Review, Prices, Weather, etc.

AMERICAN AGRICULTURIST OFFICE.  
New-York, Thursday, Dec. 18, 1862.

#### 1. TRANSACTIONS AT THE NEW-YORK MARKETS.

**RECEIPTS.** Flour, Wheat, Corn, Rye, Barley, Oats.  
24 days this month 687,000 3,354,000 2,787,000 6,350 295,000 899,000  
27 days last month 536,000 4,330,000 2,692,000 41,100 387,000 783,000

**SALES.** Flour, Wheat, Corn, Rye, Barley, Oats.  
24 days this month, 418,000 3,805,000 3,216,000 53,250 312,000  
27 days last month 670,000 6,378,000 3,435,000 33,000 361,000

#### 2. Comparison with same time last year.

**RECEIPTS.** Flour, Wheat, Corn, Rye, Barley, Oats.  
24 days 1862..... 687,000 3,354,000 2,787,000 6,350 295,000 899,000  
25 days 1861..... 705,000 3,150,000 2,361,000 203,975 260,000 1,469,000

**SALES.** Flour, Wheat, Corn, Rye, Barley, Oats.  
24 days 1862..... 418,000 3,805,000 3,216,000 53,250 312,000  
25 days 1861..... 778,000 5,641,000 3,229,000 204,000 276,000

#### 3. Exports of Breadstuffs from New-York, Jan. 1, to Dec. 17.

Flour, Wheat, Corn, Rye, Barley, Oats.  
1862..... 2,888,619 24,890,841 11,531,819 1,095,636 22,783 172,922  
1861..... 2,926,938 27,508,407 12,135,035 882,340 3,000 150,845

#### 4. Receipts of Breadstuffs at Chicago, Jan. 1, to Dec. 8.

Flour, Wheat, Corn, Rye, Barley, Oats.  
1862..... 1,694,832 12,876,537 30,913,632 942,240 947,145 3,388,997  
1861..... 1,477,615 17,542,677 30,290,096 493,752 422,803 1,394,352

#### CURRENT WHOLESALE PRICES.

	Nov. 19.	Dec. 18.
Flour—Super to Extra State	\$5 65 @ 6 40	\$5 80 @ 6 40
Superfine Western	5 65 @ 5 80	5 80 @ 6 35
Extra Western	5 50 @ 5 60	5 65 @ 6 15
Extra Genesee	5 50 @ 5 60	5 60 @ 5 80
Super to Extra Southern	5 50 @ 5 75	5 60 @ 6 10
Rye Flour—Fine and Super.	4 25 @ 5 75	4 00 @ 5 65
CORN MEAL	3 70 @ 4 25	3 50 @ 4 30
WHEAT—All kinds of White.	1 50 @ 1 65	1 50 @ 1 65
All kinds of Red.	1 16 @ 1 45	1 22 @ 1 47
CORN—Yellow.	72 @ 74	80 @
White.	72 @ 74	85 @
Mixed.	65 @ 71	75 @ 77
OATS—Western.	67 @ 69	68 @ 70
State.	67 @ 69	68 @ 70
RYE.	80 @ 90	83 @ 91
BARLEY.	1 45 @ 1 60	1 25 @ 1 45
BRANS—Medium and Pes. bu.	2 50 @ 3 00	3 35 @ 2 75
Marrow and Kidney	3 00 @ 3 25	3 50 @ 3 00
HAY, in bales per 100 lbs.	65 @ 80	75 @ 90
COTTON—Middling per lb.	69 1/2 @ 70	66 @ 66
RICE, per 100 lbs.	7 00 @ 9 25	6 75 @ 9 00
HOPS, crop of 1862, per lb.	18 @ 25	17 @ 25
FATHERS, Live Geese, p. lb.	35 @ 45	42 @ 45

SEED—Clover, per lb.	10 1/2 @	10 1/2 @	10 1/2 @
Timothy, per bushel.	2 00 @	2 35 @	2 37 1/2 @
SUGAR—Brown, per lb.	9 @	12 @	8 @ 11 1/4
MOLASSES, New-Orleans, p. gal.	40 @	50 @	32 @ 40
COFFEE, Rio, per lb.	29 @	33 @	38 @ 32
TOBACCO—Kentucky, &c. p. lb.	15 @	30 @	13 1/2 @ 30
Seed Leaf, per lb.	15 @	35 @	9 @ 30
WOOL—Domestic fleece, p. lb.	55 @	70 @	58 @ 65
Domestic, pulled, per lb.	55 @	68 @	48 @ 62
TALLOW, per lb.	11 1/2 @	11 1/4 @	10 1/2 @ 10 1/4
OIL, Cakes, per tub.	41 00 @	46 50 @	44 00 @ 51 00
PORK—Mess, per bbl.	12 87 1/2 @	13 00 @	14 00 @ 14 13 1/4
Prime, per bbl.	11 50 @	11 00 @	11 02 1/2 @ 11
BEEF—Plain mess.	12 00 @	13 50 @	11 75 @ 13 00
LARD, in bbls, per lb.	19 1/2 @	10 1/4 @	19 1/2 @ 17 1/2
BUTTER—Western, per lb.	18 @	20 @	19 @ 20
State, per lb.	21 @	25 @	21 @ 25
CHEESE.	9 @	12 @	9 @ 13
BROOM CORN—per b.	5 @	7 @	7 @ 8
Eggs—Fresh, per dozen.	20 @	25 @	22 @ 24
Limes, per doz.	18 @	19 @	15 @ 16
POULTRY—Fowls, per lb.	10 @	12 @	8 @ 9
Ducks, per lb.	12 @	14 @	10 @ 11
Geese, per lb.	11 @	13 @	7 @ 9
Turkeys, per lb.	13 @	15 @	10 @ 12
PARTIDGES, per pair.	81 @	87 @	75 @ 87
WILD FIBIGONS, per dozen.	1 75 @	2 00 @	75 @ 87
WILD DUCKS, per pair.	50 @	75 @	31 @ 33
VENISON, per lb.	12 @	14 @	10 @ 11
POTATOES—Common, p. bbl.	1 25 @	1 63 @	1 50 @ 1 75
Buckeyes, per bbl.	1 02 @	1 75 @	1 50 @ 1 75
Peach Blow, per bbl.	1 62 @	1 87 @	1 60 @ 2 00
Mercers, per bbl.	2 00 @	2 37 @	1 75 @ 2 50
Sweet Delawares, per bbl.	2 50 @	2 75 @	2 50 @ 3 00
Sweet Jerseys, per bbl.	1 75 @	2 00 @	2 00 @ 2 25
Onions, Red & Yellow p. bbl.	2 25 @	3 00 @	2 25 @ 2 50
White, per bbl.	3 00 @	3 00 @	2 50 @ 2 75
TURNIPS—Rutabagas, p. bbl.	87 @	1 00 @	1 00 @ 1 10
Marrow Squashes, per bbl.	1 25 @	1 50 @	1 50 @ 1 75
PUMPKINS—Cheese, per 100.	6 00 @	10 00 @	5 00 @ 10 00
CABBAGES, per 100.	3 00 @	4 00 @	3 00 @ 5 00
APPLES, Western, per bbl.	1 50 @	1 75 @	1 62 @ 1 87
Apples, choice, per bbl.	2 00 @	2 37 @	2 50 @ 3 00
Apples, River, per bbl.	1 00 @	1 25 @	75 @ 1 00
QUINCES, per bbl.	2 50 @	3 00 @	2 00 @ 3 00
CRANBERRIES, Cape Cod, p. bbl.	11 00 @	12 00 @	11 @ 15
Western, per bbl.	9 00 @	11 00 @	7 @ 9
DRIED APPLES, per lb.	5 1/2 @	6 @	4 @ 6
DRIED PLUMS, per lb.	12 @	13 @	12 @ 14
DRIED PEACHES, per lb.	15 @	18 @	15 @ 18
HICKORY NUTS, per bushel.	2 00 @	2 50 @	1 75 @ 2 20
CHESNUTS, per bushel.	5 00 @	6 00 @	4 50 @ 5 00

The condensed Tables, given above, present in concise form a summary of the transactions for a month past. These figures are laboriously prepared from a large mass of notes collected by us daily, in the markets and elsewhere. It is to be noted, however, that the past business month has been only 24 days, owing to the occurrence of Thanksgiving holiday, to there being one day less in November than in October, and to the fact that there were five Sabbaths in November, this year, the last two of which are included in the month ending to-day. Still, it will be seen that the receipts were 131,000 barrels of flour in excess of the previous month, equivalent to 655,000 bushels of wheat. The receipts of Wheat are very nearly the same, if we allow for the extra days last month. Corn, Rye, and Oats, have come in more freely. The sales of Breadstuffs have been considerably lessened, as shown in the second part of table 1. By reference to table 2, it will be seen that while the receipts (allowing for one day less) have been about the same as last year, the sales have fallen off materially. Inland navigation is now closed, and though the railroads will continue to bring forward considerable supplies during the Winter, the prices will depend much upon the amount of the supplies already here. These are not believed to be very large. During the past month there has been no exciting cause of activity in Breadstuffs, and the market has been very quiet. The variations in the value of Gold and foreign exchange, have had the most to do with changes in prices. As was shown in an editorial article in the *American Agriculturist* for November (page 328), a rise in the relative value of Gold and currency, produces a corresponding rise in Sterling exchange, in which case it is more advantageous to send abroad wheat than gold, and the export demand is consequently better. During the past four weeks gold has vibrated between \$128 and \$133, or a premium of 28 to 33 per cent, upon the standard paper currency, and the prices of Wheat and Wheat Flour, and Corn, have changed nearly in the same ratio. The financial policy to be adopted by Congress is not settled. On the one hand it is proposed to raise money for the expenses of Government and the war, by selling stocks at whatever price they will bring in the market. This would be a move towards returning to a specie basis. On the other hand it is proposed to increase the issue of currency. If the latter policy be adopted, and many financiers think it the only practicable mode of raising funds, the relative value of gold will be increased with the increase of paper issues, and the prices of farm products will rise correspondingly. Thus: should the premium on gold rise to 100 per cent, it would be just as cheap to send abroad Wheat at the price of \$3 per bushel, in currency, as to sell it at \$1.50 per bushel if gold were the par standard of valuation. As we showed in the article above referred to, farmers are directly benefited by this disturbance in the relative value of gold and paper currency, whatever may be the present or ultimate effect upon other classes and upon the country at large. If the currency be doubled, the prices of farm products go up accordingly. It is true that these prices are not on a gold basis, but if the double price be in a currency that is at par in paying of debts for land, or other liabilities, the increased nominal price is directly advantageous. The general

opinion is that further issues of currency will be made, and that the prices of breadstuffs will go up; and we find dealers disposed to hold on to their present stocks. Rye has come in much less freely, while the transactions in stocks on hand have been much lighter than the previous month, and market prices average about 5 cents per bushel higher than at the date of our last report. Barley has not been so largely dealt in; the fever heat of speculation has in a measure subsided, and prices have declined from \$1.45 @ \$1.60 to \$1.25 @ \$1.45 per bushel. Provisions have not been very active. Mess Pork has advanced fully \$1 per barrel. Live Hogs are coming forward, for packing at this point, more freely than ever before, the receipts for the past week being 53,778. This is caused by the unsettled condition of things at the Southwest, and by the scarcity of barrel-makers at the West. New-York city is just now the "Porkopolis" of the country. Groceries, Rice, Tobacco, and Wool have been quiet, without material change in prices. Hay, Hops, and Seeds have been in good demand. The present prices, and any changes since last month, are indicated in our table of Prices Current.

**N. Y. Live Stock Markets.**—THE CATTLE MARKETS have been abundantly supplied during the past month, the average being 5,342 per week. Prices fell off a little Nov. 25, advanced 1/2 c. Dec. 2nd, and 1/4 c. more Dec. 9th. At the last general market, Dec. 16th, prices again declined 1/2 c. There were 6,376 heaves on sale, some of them very fine. Prices ranged at 10c. @ 12 1/2 c. per lb. for the estimated weight of the four quarters, for Christmas or premium bullocks; 8 1/2 c. @ 9c. for prime animals; 7c. @ 8c. for common to medium; while the poor grades, some of them genuine "scallawags" went at 5 c. @ 6c. The average of all sales was about 7 1/2 c.

**Veal Calves.**—Receipts have averaged 430 per week. Fewer calves are sent to market now than at any other season of the year. They sell quickly, the best for 6c. @ 6 1/2 c. per lb. live weight; 5c. @ 5 1/2 c. for good and 3c. @ 4c. for bobs and coarse overgrown calves.

**Sheep and Lambs.**—Receipts are falling off and prices gradually advancing. Average receipts 10,039 per week, with a demand exceeding the supply. Several thousand dressed sheep are sent in each week, which makes up in part for the deficiency of live stock. Quite a number of extra large fat sheep sent in for Christmas mutton brought \$15 to \$18 per head. Some of them weighed 240 lb. each. Good sheep at 100 lbs. are worth prices equivalent to 5 1/2 c. per lb. live weight and fair stock 5 1/4. Pelts are worth in quantity \$2.00 @ \$2.25 each.

**Live Hogs.**—Were never before so abundant in this market. Receipts have averaged 47,166 per week, and numbered for the week, ending December 16, 53,778—the largest number ever received in a single week. In the face of such arrivals hogs are selling well and prices have advanced a little during the month. Prime fat, heavy, corn-fed hogs readily command 5c. @ 5 1/2 c. a. per lb. live weight; medium hogs 4 1/2 c. @ 5c., and distillery-fed 3 1/2 c. @ 4 1/2 c. Packing is carried on to an extent never before equaled in this region.

**The Weather** has generally been fine for winter with but little severe cold, the coldest day being 14° above zero. We have had comparatively but a light amount of rain and one fall of snow, an inch deep. OUR DAILY NOTES CONDENSED, read: November 20, 21, heavy N. E. rain—22, cloudy, cool—23, 24, clear, windy—25, clear A. M., cloudy P. M., rain at night and on 26—27, 28, clear, fine—29, clear A. M., light rain P. M.—30, clear, mild.—December 1, light rain—2, clear, fine—3, cloudy A. M., and slight rain P. M.—4, cool—5, cloudy A. M., slight rain P. M., and 1 inch snow at night—6, clear, cool—7, coldest day of the season, mercury 14°—8, clear, cold—9 to 13, fine, clear, mild days—14 to 18, fog A. M., clear and mild P. M. both days—16, windy with showers—17, 18, 19, clear, cool.

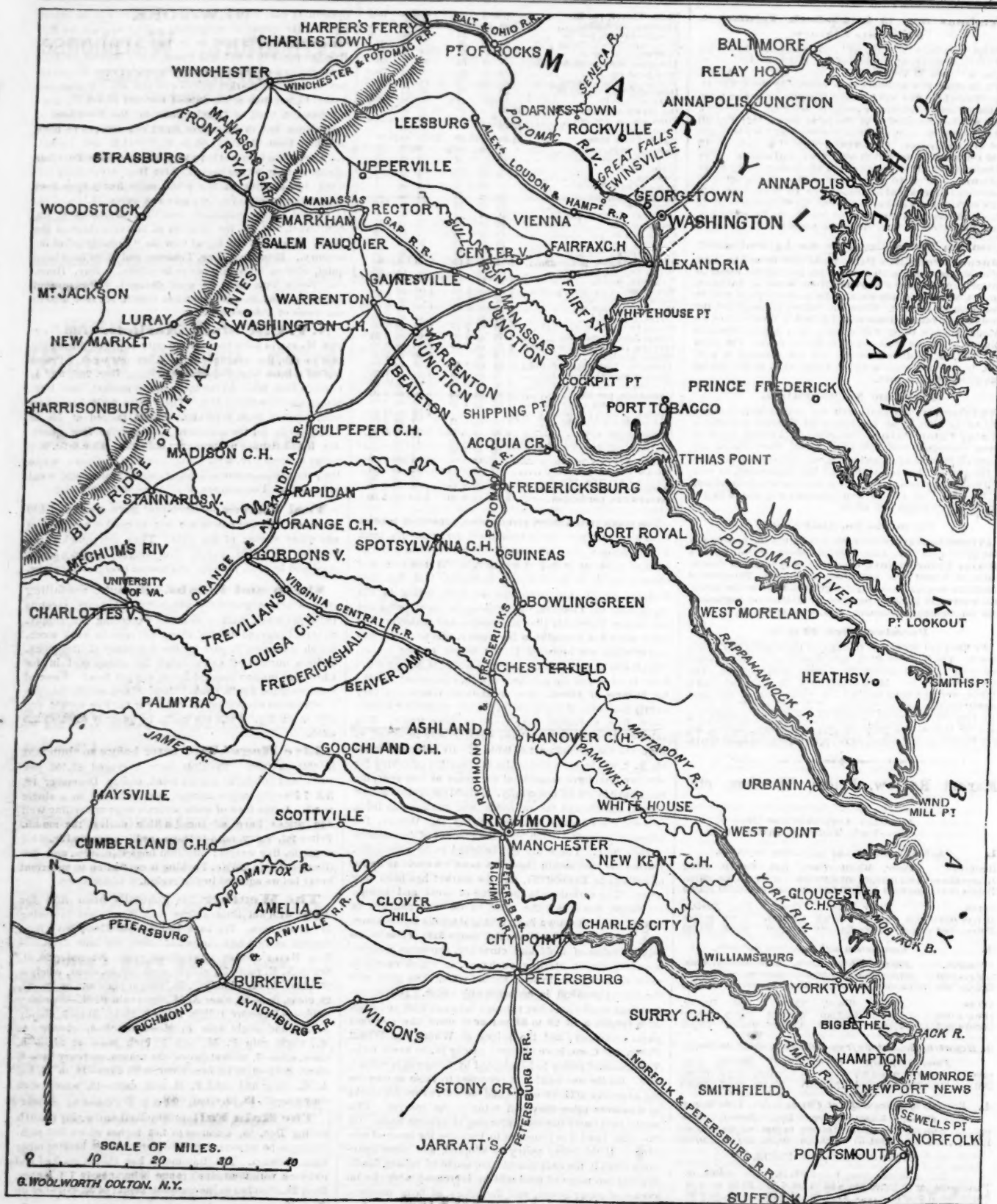
**The Rain Fall** and melted snow, for month ending Dec. 15, amounts to 4.03 inches which fell sufficiently to be measured at six different times, besides other light showers. The Barometer has shown marked and extreme variations, the range being nearly 1 1/2 inches, from 29.55 inches to the unusual height of 30.70 inches on Nov. 16.

#### Thermometer at 6 A. M., New-York.


[Observations carefully made upon a standard Thermometer (Fahrenheit.)—indicates rain—s, snow.]

NOVEMBER.											
1.....	62	7.....	54	13.....	47	19.....	46	25.....	45	31.....	38
2.....	62	8.....	52	14.....	36	20.....	56	26.....	40		
3.....	61	9.....	53 1/2	15.....	40	21.....	57	27.....	33		
4.....	57	16.....	41	16.....	25	22.....	42	28.....	56		
5.....	46	17.....	36	17.....	39	23.....	36	29.....	37		
6.....	36	18.....	45	18.....	44	24.....	32	30.....	35		
Average.....											

DECEMBER.											
1.....	47	4.....	29	7.....	14	10.....	26	13.....	37		
2.....	37	5.....	34	8.....	18	11.....	34	14.....	40		
3.....	30	6.....	20	9.....	20	12.....	30	15.....	46		



## Outline Map of Eastern Virginia.

The above map is inserted for the convenience of our readers, who are all doubtless interested in the momentous events now transpiring, and about to transpire in the region indicated.—A very large and very minute map of the whole of the State of Virginia, giving even the smallest towns, roads, etc., can be supplied at the *Agriculturist* Office for 25 cents. (Sent post-paid by mail for the same price.)  The large map can no longer be afforded as a premium.

**Exhibition Tables at the Office of  
the American Agriculturist.**

The following articles have been placed upon our tables since our report in the November *Agriculturist*.  
**FRUIT.**—Apple.—Baldwin R. I. Greening, Vandever, from M. J. Taylor, of Gloster, N. J.... Sweet-sour apples, from Ich.

Pope, of Enfield, Mass....Gloria Mundi, from C. H. Lillien-  
thal, of Yonkers, N. Y....Maiden's Blush, from Wm. E. Stiles,  
of Flushing, L. I....Hawthornes, Dutch Mignonette, from P. J.  
Ward, of Bloomfield, N. J....Mellow Heart, from Mrs. D.  
Lawrence, of Mt. Pleasant, N. Y....French Pippin, from F. C.  
Farley, of Milburne, N. J....Sweet-sour Apples, from C. J.  
Minor, of Woodbury, Conn....Baldwin, Hubbardston Non-  
such, Killam Hill, from Josh. T. Holt, Andover, Mass....  
Hawthornes, Granny Winkle, from E. Williams, of West

Bloomfield, N. J. . . . R. I. Greening, from Edw. Brown, of Deer Park, L. I. . . . Union Apple from Greenwich, Conn. . . .  
 Gloria Mundi, from P. F. Peck, of Yonkers, N. Y. . . . Sweet  
 sour Apple, from T. Wilcox, of Bennington, Vt. . . . Iron Ap-  
 ples, from G. M. Usher, of Port Richmond, Staten Island. . . .  
 Gloria Mundi, from West Farms, N. Y. . . . Gloria Mundi, from  
 Robt. French, of Westfield, N. J. . . . Penna Winter Apples,  
 from S. W. Noble, of Jenkinstown, Montgomery Co., Penna  
 . . . Collection of Apples, from P. H. Ashton, of Middletown,



Conn....Apples from J. M. Hugbut, of N. Y....Newtown Pippin, from Benj. Clapp, of Wappinger's Falls, N. Y.... Wine Apple, from Josh. N. Huribut, of Winsted, Conn.... Varieties for name, from Solon Robinson, J. M. Knowlton, J. P. Veeder, and C. Fenton.

**Pears.**—Beurre Diep, Beurre Clairgeau, Belle de Bruxelles, Vicar of Winkfield, Duchesse d'Angouleme, Seedling from J. H. Gibson, of Keyport, N. J.... Vicar of Winkfield, Winter Nella, from J. W. Everts, Brooklyn, L. I.... Virgaleu, from Dr. Trimble, of Newark, N. J.... Beurre Clairgeau, W. H. Goldsmith, of Lyons Farm, N. J.... Lawrence, Beurre d'Anjou, Duchesse d'Angouleme, Oswego Beurre, Beurre Clairgeau, from Orange Judd, of Flushing, L. I.... Beurre Bosc, from Aug. A. Leverich, of Brooklyn, L. I.... Branch with ten pears (magnificent), from W. D. Voorhees, of Newark, N. J.... Flemish Beauty, Beurre Bosc, from Underwood Farm, L. I.... Swan's Orange, from Geo. O. Street, of Mt. Vernon, N. Y.... Winter Pears, from Thomas Sprunt, gardener to C. S. Wolfe, of Westchester, N. Y.... White Doyenne, from C. D. Rust, of Fulton, N. Y.... Vicar of Winkfield, from Isaac N. Pierson, of Newark, N. J.... Bicknell Pears, from T. M. Brewer, of Hingham, Mass.... Catillac Pear, from F. C. Farley, of Milburne, N. J.... Gray Doyenne, from Moses J. Taylor, of Closter, N. J.... Catillac Pear, from R. Sterling, of Suspension Bridge, N. Y.... Varieties for names, from J. H. Gibson, E. Williams, Solon Robinson, and Moses J. Taylor.

**Other Fruits.**—Charter Oak Grape, from G. A. Blood, of West Farms, N. Y.... Muskingum Grape, from H. M. Dewey, of Cluster Grape, from R. Richards, of Tremont, N. Y.... Isabella Grape, (very fine) from S. W. Clarke, of Naples, N. Y.... Variety of Grapes for name, from Dr. Ward.... Oage Orange Fruit, from J. VanBrunt, of New Utrecht, L. I.... Pear Quince, from Gen. E. R. V. Wright, of Forest Home, N. J.... Pear Quince, from E. Williams, of West Bloomfield, N. J.... Orange Quince, from Chas. F. Day, of Oak Valley, N. J.... Pear Quince, (finest of the season) from "Ignoramus," of Bloomfield, N. J.... Cranberries, from W. J. Spence, of Eden Vale, L. I.... California Tomato, (weight 2 lbs. 7 ozs.) from Mrs. Key, of Fort Lee, N. J.... Belle de Fontenay Raspberry, from W. F. Helms, of Woodstock, N. Y.... Jar of Brandy Peaches, "Late Heath Cling," from Isaac Pullen, of Hightstown, N. J.

#### FLOWERS.

Chrysanthemums, (fine collection) from Wm. F. Helms, of Woodstock, N. Y.... Cut Dahlias, from C. S. Pell, of New-York Orphan Asylum.... Cut Dahlias, from Orange Judd, of Flushing, L. I.... Dahlias from Ferd. Schleiter, of Williamsburg, L. I.... Pompon Chrysanthemums, (fine collection) from H. T. Haviland, of Brooklyn, L. I.... Pompon Chrysanthemums, from Mr. Lyon, of Rossville, L. I.

#### VEGETABLES, SEEDS, ETC.

**Potatoes.**—Pink Eye Rusty Coat, Bulky's Seedling, Cuzco, Garnet Chili, Snow Flake, from Wm. S. Carpenter, of Rye, N. Y.... Early Samaritan, from Simeon Allen, of East Chatham, N. Y.... Peach Blow, from A. McCotter, of Holbrook, L. I.... Peach Blow, (fine), from James M. Prime, of Monmouth Co., N. J.... Peach Blow, from Wm. Robinson, of Flatbush, L. I.... Peach Blow, from D. O. Calkins, of Brooklyn, L. I.... Prince Albert, (very fine), from Dr. J. M. Howe, of Passaic, N. J.... Purple Chili, from H. D. Van Brunt, of Englewood, N. J.... Peach Blow, Prince Albert, from E. J. Swards, Jr., of Port Chester, N. Y.... Bulky Seedlings, from F. Vall, of N. J.... Wild Mexican, from G. M. Usher, of Port Richmond, S. I.... Potatoes raised on the Highlands of New-Jersey.

**Corn.**—Red, Caragua, Yellow Canadian, Pop, Rice, Brazilian (smallest known), Two Hybrids, from W. F. Helms, of Woodstock, N. Y.... Pop Corn, from J. M. Huribut, of N. Y.... Belden, Imperial King Philip, Devereaux, Mammoth Eight-Rowed, Richard's Treat, from Wm. S. Carpenter, of Rye, N. Y.... King Philip, (from seed distributed from Am. Agriculturist office) from "Subscriber," of Logan Co., Ill.... North Carolina, from R. P. Titus, of Glen Cove, L. I.... Amant Corn, from Mr. Swain, of Bronxville, N. Y.... White Flint (fine) from A. Hollingers, of West Hoboken, N. J.... Red (fine), White (curious) from Mr. Hume, of White's Farm, N. J.... White Flint, (18 1/2 inches long), from Mr. Woodward, of Mortonville, N. J.

**Other Vegetables, etc.**—Striped Gourd, from John Kirkman, of Brooklyn, L. I.... Mock Orange Gourd, from Henry W. Carey, Fourth-av., N. Y.... Fancy Gourd, from T. C. DeMarcellin, of N. Y.... White Egg Gourds, from J. B. Bryan, of Brooklyn, L. I.... Egg Gourds, from Morris Strong, of Northampton, Mass.... California Gourd, from Chas. F. Day, of Paramus, N. J.... Chinese Egg Plant Fruit, from A. P. Cummings, of N. Y.... Purple Egg Plant, from A. H. Winslip, of Flatbush, L. I.... Turban Squash, from Fritz Meyer, of No. 25 Second-av., N. Y.... Cheese Pumpkin and Fancy Squashes, from C. S. Pell, of N. Y. Orphan Asylum.... Yellow Peppers, (very fine), from L. Jacobs, Staten Island.... Red Peppers, (fine), from O. Jones, of Lyons Farms, N. J.... White Sugar Beet, (weight 20 lbs.) from J. VanBrunt, of New Utrecht, L. I.... Turnip Beet, from Jas. Martin, of North Prospect, N. J.... Curious Beet, (set for seed, but grew seven additional beets—all from original root) from J. McElwee, of Walker Valley, N. Y.... Blood Beet, from A. McCotter, of Holbrook, L. I.... Blood Beets, (very large), from Chas. Harriman, of Irvington, N. Y.... White, and Early Horn Carrots, (very fine), from Jas. P. Fagan, Esq., Supt. Ward's Island, N. Y.... Early Short Scarlet Carrot, from John Fleming, of Readington, N. J.... Long Orange Carrots, from J. VanBrunt, of New Utrecht, L. I.... Long Orange and Altringham Carrots, from Mr. Halsted, of Rye, N. Y.... Horseradish, (3 lbs. weight) from J. Reeder, of Duck Island, N. J.... Peas for name, from R. Callif, of East Smithfield, Penn.... Kohl Rabi, (12 heads from one root), from Dr. Barker, of Brooklyn, L. I.... Turnip grown around an iron wrench, from Wm. Ritchie, of Scotch Plains, N. J.... California Radishes, (very fine), from Wm. Blair, of Hackensack, N. J.... Vegetable bouquet, (imitation flowers cut out from beets, carrots, turnips, onions, etc.—very fanciful and ingenious), from B. Stephens, of Washington Market, N. Y.... Cotton grown in Illinois, from Rev. J. A. Bent, of Hotolet, Washington Co., Ill.... Sorghum Seed, from John Fleming, of Readington, N. J.... Palmetto Tree (in pot) from Port Royal.... Red Onions, from A. McCotter, Holbrook, L. I.... White Turnip, from Eliza

Mott, of Glenwood, L. I.... Aplos Tuberosa, from Maj. J. B. Hoffman, Indian Agent of Dakota Territory.... Buckwheat, (2850 seeds grown from one seed), from Andrew S. Nash, of Westport, Conn.... Sugar Cane from New-Orleans, (large growth), from G. Jones, Esq., Times Office, N. Y.... Cauliflower, (fine growth), from Richard R. Bennett, of Fort Hamilton, L. I.... Mangel Wurzel, (fine), from Chas. Harriman, Irvington, N. Y.... Jersey Grasses, from J. B. Compton, of Mauricetown, N. J.

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New Corn Husker and Clothes Wringer, from Haines & Pell, of 37 Courtland-st., N. Y.... Battlenake Skin, (very large), from C. R. Tyler, of Bay City, Wis.... Currant Wine, from E. J. Swards, Jr., of Portchester, N. Y.... Sorghum Syrup, (fine), from John Fleming, of Readington, N. J.

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American Bird Fancier	50
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American Florist's Guide	75
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Allen on the Culture of the Grape	100
Allen's (R. L.) American Farm Book	100
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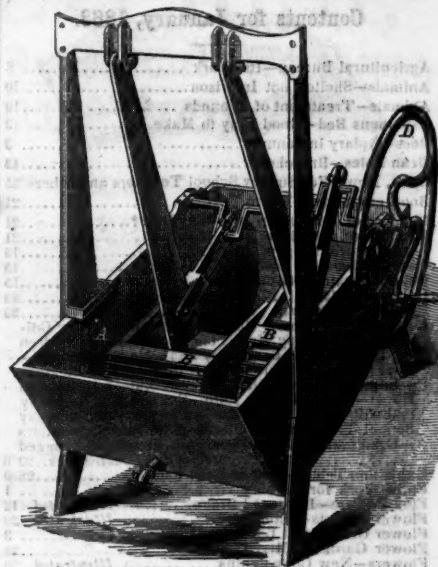
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1863.	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
JAN.	4	5	6	7	8	9	10
FEB.	1	2	3	4	5	6	7
MARCH.	1	2	3	4	5	6	7
APRIL.	5	6	7	8	9	10	11
MAY.	10	11	12	13	14	15	16
JUNE.	14	15	16	17	18	19	20
JULY.	12	13	14	15	16	17	18
AUG.	9	10	11	12	13	14	15
SEPT.	27	28	29	30	1	2	3
OCT.	25	26	27	28	29	30	31
NOV.	1	2	3	4	5	6	7
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